

anticipate is how much fun I'm having. It's been really wonderful how many people have offered to give me help and ideas of what to do."

Bruington has been adjusting to her new role, spending a little time investigating what it means to be a leader. She peels back a copy of Donald Kraus' "The Way of the Leader" to read a passage she's particularly fond of.

"Organizations and nations prosper or decline based solely on the vision and capability of their leaders," Bruington quotes. But typical of her low-key style, she adds: "I like that, but I don't think it represents me well because it gives too much emphasis on the leader."

As an assistant superintendent, Bruington was fairly quiet during board meetings. She is a soft-spoken woman, more inclined to don a long-flowing dress or skirt than power suit and heels. "I'm a fairly casual person," she said of her style and dress. "I much prefer to blend in. I do in fact own a red jacket, but I don't wear it very often."

Bruington comes from Lakin, Kan., a place so small that she and her six senior classmates made up the largest class ever graduated at Kendall High School.

Her role model and mentor was the district's superintendent, who also served as her school's basketball coach and history teacher.

"Boy did he have high standards, and we were expected to keep them," she

recalled. At home, on the family ranch, she completed her chores, mending the fences and gathering the wheat and corn.

Bruington left town to pursue her education. At the University of Northern Colorado, she earned a bachelor's degree in elementary education and completed her master's in reading/curriculum and supervision in 1967. She came very close to receiving her doctorate in communications at Denver University but didn't finish her dissertation after moving to California.

She had been teaching first grade in Greeley, Colo., for about 10 years before moving to California and eventually becoming principal of 800-student Trona Elementary School in the Mojave Desert. She also worked for the Apple Valley Unified School District as director of curriculum before taking the assistant superintendent job in Santa Paula in 1989.

Many say Bruington fits right in with the small-town atmosphere. Colleagues say she doesn't create a distance between them but rather tries to treat everyone as individuals.

"It's easy to confide because I feel comfortable because she'll share things too," said Glenn Deines, principal of Blanchard Elementary. "She's not just a boss. She's a real caring person who has a family and other things she likes to do besides go to work."

Bruington recently attended a grass-roots Latino Townhall meeting to hear parents' concerns. As they spoke, she stood behind the lectern, diligently jotting down notes like a student. Among the tough issues ahead of her are low standardized test scores, largely due to the town's blue-collar status and the large number of children with limited proficiency in English.

Along with high school district Supt. William Brand, who has spearheaded a movement for higher standards, Bruington is working to hike standards in her district as well.

She is pushing to have every child in Santa Paula speak both Spanish and English. Her long-term goal is to offer kids the chance to pursue a third language by the fifth grade.

At the Latino Townhall meeting, a mother asked why her sixth-grade son still could not read in English. Another mother expressed concern that her kindergarten child was not challenged enough.

Many said Bruington is off to a good start just by showing a willingness to listen.

"She recognizes the vast majority are of Hispanic background," said Tony Perez, chairman of education for the Latino Townhall, "and it's a way of saying, 'I am concerned about their education as well as everyone else's.'"

49. Los Angeles Times

* 05/27/97; Edition: Valley Edition; Section: Metro; No Desk; Page B-3

Computers Key In on 1st-Grade Readers

By CLAIRE VITUCCI

First-graders at Chandler Elementary School don't have to just look to their teacher to learn their ABCs.

An interactive computer program called WiggleWorks, run by Cal State Northridge's campus literacy center, helps the 6- and 7-year-olds learn to read and teaches them computer skills at the same time.

The computer follows along with what the students are learning in class and reinforces the teachers' lessons. Then each day, two students at a time break away from the class to practice what they've learned.

The children draw and color pictures they derive from their vocabulary words. They write stories and, if they can't

pronounce a word from their reading books, the computer will say it for them.

Of course, the kids go for the computer's special effects.

"It's fun to blow up things," said Jasmine Russo, 7, watching as the vocabulary words on the screen blast apart, allowing her to put them together again.

Raelene LaBorico, a first-grade teacher at Chandler, the first Valley site for the program, said when she gives a lesson she controls what the children are learning, but when the kids use the computer, they control the extra help they receive.

Phil Kligman, director of the CSUN literacy center, is animated as he watches the children type simple sentences on the

screen. A teacher since 1970, Kligman holds a doctorate in education and is a language arts specialist. Although statistics are not yet available to tell how well the computer reading program is doing, Kligman said he can see student improvement.

"We're seeing a great amount of word recognition, phonics through writing and more independent reading," he said.

WiggleWorks is funded through private donations and costs about \$6,000 per classroom to get the program up and running, Kligman said.

So far, only the three first-grade classrooms at Chandler Elementary School have WiggleWorks. Three second-grade classes will have the program in September along with

50. Chicago Sun-Times

May 27, 1997

College costs going higher

BY SUSAN DODGE Higher Education Reporter

Tuition and fees will rise an average of 5.4 percent at private colleges and universities in the Chicago area this fall, well above the inflation rate, a Chicago Sun-Times survey has found.

At public universities in Illinois, tuition and fees will increase an average of 4.7 percent.

By comparison, the Chicago area Consumer Price Index rose 2.9 percent for the 12 months ending April 30.

The increases continue a trend of college costs outstripping inflation that dates to the late 1970s. The average annual cost for tuition and fees at state-run universities grew at nearly triple the rate of inflation since the mid-1980s, and costs of private universities at nearly double the rate of inflation, the Illinois Board of Higher Education reported last year.

That could change at Southern Illinois University. Tuition and fees will rise about 4.8 percent next fall, but the SIU Board of Regents will vote June 11 on a measure to tie future tuition, room and board and fee increases to the Consumer Price Index. The board wants to keep the university "accessible to most people," SIU spokesman Jack Dyer said.

For this fall, Loyola University led the private schools with an 8.7 percent increase in tuition and fees. Lewis University in Romeoville had the lowest increase, only eight-tenths of a percent.

The bill for incoming Loyola freshman Melissa Drozd, 17, of Harwood Heights, will be \$22,031 next year for tuition, fees and room and board. Living expenses, books and supplies likely will bring her total closer to more than \$25,000.

Her parents will pay about \$12,000

for the year, however, because of a combination of loans and financial aid from the university, said Mariann Drozd, Melissa's mother.

"It's overwhelming," Drozd said. "I had always known it was going to be expensive, but when you actually see the numbers, it is a little bit of a shock."

Drozd said Melissa, who plans to major in biology and go on to medical school, will have to work part time to pay for some of her expenses. "She knows it won't be a free ride," she said.

Loyola students are facing their third consecutive year of increases of more than 8 percent. Loyola officials say the university needs the increased tuition revenue to meet operational costs. The university increased undergraduate financial aid 23 percent this fall to \$28 million.

"We continue to acknowledge that there are students who want to attend Loyola—fine students we also want to have here—who cannot afford the cost of a private university education," said Ronald Walker, a Loyola executive vice president. "We haven't deserted these students. We continue to make provisions for financial need—and academic merit."

Many other institutions announcing tuition increases say the increased revenue helps them maintain educational quality.

When Northwestern University announced a 5.7 percent hike in tuition and room and board to \$25,525 earlier this year, President Henry Bienen said the university planned to improve undergraduate education beginning this fall. He said Northwestern will enhance its study-abroad program, upgrade computer equipment, revise its engineering curriculum and continue

renovating its dorms.

At the University of Chicago, where tuition, fees and room and board will be \$30,081 in 1997-98, a 6.1 percent increase, the administration is trying to appeal to undergraduates by renovating the student union, adding new restaurants and making plans for an athletics center.

Escalating costs are driving more students to choose public universities, said Jane Mason, a college counselor at Ridgewood High School in Norridge.

"We try to tell our kids not to make a choice based on price and not to narrow things down too early, but money definitely is a factor," Mason said. "A lot of kids don't realize that they might be able to get a good deal at a private university through a combination of financial aid, work-study jobs and loans."

College sticker shock hits home for Mason, who has a son at Carthage College in Kenosha, where tuition and room and board run \$19,000 annually.

Her son, Colin, 19, earns his campus spending money in a work-study job. He also has a \$4,000 financial aid package from the school, Mason said.

"I worked on campus, my husband worked on campus, so we encouraged him to do it because it's a nice opportunity and you don't have to go far to get to your job," Mason said.

Among public institutions, Western Illinois University had the largest jump in tuition and fees—an 8 percent increase to \$3,036.

Students attending the University of Illinois at Urbana, the state's premier public university, will face a 4.5 percent increase in tuition and fees to \$4,339. Room and board costs will bring the total bill to \$9,049.

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million for schools and a \$2 billion bond program.

The speaker's approach, which he said would include unspecified teacher accountability reforms, differs from Edgar's plan with its provision to give tax relief to apartment dwellers. A substantial population in Chicago, renters could deduct part of their monthly housing payments from state income taxes, he said.

Madigan's plan also would increase transportation reimbursements to parents of private school students, one of his long-standing pet initiatives.

Senate Republicans reacted cautiously to Madigan's decision to press ahead with

Edgar's proposal to increase the income tax from 3 percent to 3.75 percent — a boost that Senate President James "Pate" Philip (R-Wood Dale) repeatedly has characterized as the "largest tax increase in state history."

"A 3.75 percent tax, in and of itself, doesn't pass. It doesn't get called for a vote. A 3.75 percent income tax had better have some pretty darned good reform in it to even get consideration," said Sen. Dan Cronin (R-Elmhurst).

The rough sketch of Madigan's strategy capped a day that included intense lobbying at the Statehouse by teachers unions and the removal of pro

and con school-funding banners from the Capitol rotunda after a vandal apparently tried to take down the anti-tax sign.

House Minority Leader Lee Daniels (R-Elmhurst), still touting his own competing plan after meeting with Edgar and other legislative leaders, said few of his members would support Madigan's bill.

"The majority of my members in my caucus are not in favor of an income tax increase," Daniels said. "Every other state in the union is looking at reducing costs, except for Illinois, where they are talking about increasing taxpayers' costs." ■

24. Seattle Times

May 20, 1997

Computer in a backpack: Once the expensive toys of business executives, laptops are growing presence in the classroom

by Katherine Long

Seattle Times Eastside bureau

BELLEVUE - Lindsay Nightingale's laptop computer is a 6.8-pound rectangle of gunmetal-gray plastic, circuitry, buttons and tiny lights. It goes with her everywhere in its own special backpack.

The seventh-grader is so fond of it that she even gave it a name: Robin.

This warm-and-fuzzy relationship between a girl and her computer delights educators at the all-girls Forest Ridge School of the Sacred Heart, a Bellevue Catholic school for grades five to 12. Convinced that technology enhances learning and concerned that girls were getting left behind, administrators have made laptop computers mandatory for seventh- and ninth-graders. In 1999, laptops will be required for every student at Forest Ridge.

"This generation of students needs this technology now," said Sister Suzanne Cooke, head of the school.

Once the expensive playtoys of business executives, laptops are a growing presence in the classroom, says Allen Glenn, dean of the College of Education at the University of Washington.

Forest Ridge is part of a national, 52-school pilot program to test laptops in

schools. Sponsored by Microsoft and Toshiba, it involves equipping 10,000 students and teachers with \$2,000 Pentium laptops, manufactured by Toshiba and loaded with Microsoft Office software. The \$2,000 price tag is a cut rate and includes technical support.

School officials and parents say a Snohomish School District laptop experiment in fifth and sixth grades, involving 268 computers, was so successful this year that it will be expanded next year. Federal Way will double the size of its laptop program at Thomas Jefferson High School to 100 students next year. Both programs use hardware and software provided by Toshiba and Microsoft.

Apple Computer is also entering the laptop market: It is starting to ship its new \$750 computer, the eMate, to schools around the area. Not quite a laptop, the pint-size eMate will use Apple's handheld Newton technology and connect to Macintosh or PC computers.

The question of effectiveness remains unanswered. "Is it helping kids to do what they need to do or is it an \$800 pencil?" Glenn asks. "We don't know that yet."

Forest Ridge educators don't need

studies; they think laptops have proved themselves in the classroom. With laptops, Cooke says, students "are the architects and designers of their own learning."

What makes a laptop computer better?

"It's yours," said Janet Graeber, director of the Forest Ridge high school. "You dictate the time and place of use. You don't have to wait in line (at school or home) to use the computer."

For many students, the sense of ownership translates into an urge to do extra work, simply because it's fun to use a computer.

Tenth-grader Laura Levings demonstrates a science report on her laptop: She drums her fingers on the keyboard, wiggles the mouse pointer across the screen, and her voice comes out of a tiny speaker while the words flash across the screen in a presentation on the element cerium. It includes animated figures and sound effects.

"There were minimum requirements," Laura explains, looking a little sheepish. "I decided to make it more interesting."

Before she got her laptop, Laura didn't like computers. Now, "I don't use my (desktop) computer at home anymore. I gave it to my dad."

Students use their laptops to take

notes, organize their schedules, explore math concepts and create multimedia reports. The computer relieved the tedium of assignments that required the repeated use of mathematical formulas, Cooke says.

You might think that a classroom full of laptops would be a quiet place, each student silently bowed over a computer. But many class assignments turn into information-sharing sessions. Students swap information, lean over each other's computers, discuss how to do technical things and examine the results.

On a recent day in Sue Turner's world-history class, students entered demographic facts about a variety of Middle Eastern countries into a spreadsheet, then made the computer create graphs to show how the countries differed. The steady clack-clack of typing fingers and the murmur of voices were sometimes punctuated by exclamations of surprise - "Whoa, look at this!" - as the computers turned raw data into meaningful graphs.

This kind of collaborative learning and teamwork is just what educators like to see, says Glenn, the UW dean. It's also a good sign when the student knows more than the teacher and the roles become reversed, as often happens at Forest Ridge.

"It's hard to tell who's the teacher and who's the student," Cooke says.

Glenn thinks laptops could resolve concerns about equity - that is, which students have access to technology and which do not.

But that's a big if because laptops, Glenn notes, are "phenomenally expensive."

In the small, independent world of a private school, getting laptops to students was not difficult. Forest Ridge students who could afford them were required to buy the \$2,000 computers. The school, where tuition is \$10,000 a year, bought computers for students who couldn't afford them. And it purchased laptops for all teachers.

But public schools are constrained by funds and issues of fairness. Seattle's Meany Middle School has 117 laptops, but the school cannot send them home with students because an insurance program was too expensive, says Les Foltos, director of instructional technology for the Seattle School District. And Foltos agrees that allowing students to take them home is what makes laptops unique.

In Federal Way, 55 students at Thomas Jefferson High leased laptops as part of the Microsoft-Toshiba pilot

program. Federal Way School Board member Ann Murphy voted against the program.

"In these times when money is tight, is this really giving us the most bang for the buck?" she asked.

Forest Ridge administrators acknowledge that laptops may be too expensive for their public-school counterparts. They hope their program can serve as a kind of laboratory where the laptop can be put to the test. To educators, the laptops represent the latest in high-tech learning; to the high-tech industry, schools represent an enormous new market of users. But Cooke doesn't really care if the high-tech companies' motives are self-serving. The technology happens to work very well with students. And it is what they will be using when they enter the work force, she says.

The biggest problem so far has been technical. The delicate machines weren't made to be tossed about in a student's backpack, and many laptops have made trips to the school's "laptop hospital."

Cooke calls the laptop the most powerful education tool she has seen in 19 years as an educator.

"This is the most hopeful thing in education," she said, "and that's not hyperbole." ■

25. Chicago Sun-Times

May 22, 1997

City expanding summer programs for kids

BY LYNN SWEET Sun-Times Washington Bureau

WASHINGTON — In a bid to reduce youth involvement in drugs and gangs, Chicago schools, libraries and parks will vastly expand summer programs, with nearly every city school to be open in July and August, Mayor Daley said Wednesday.

The mayor, president of the U.S. Conference of Mayors, discussed Chicago summer plans at the White House after he delivered to President Clinton a drug-control plan developed by the group.

"What we are trying to do is the greatest alternative to gangs and drugs," Daley said. "We did it and we are expanding it again this year."

The goal this year is to provide

programs for 235,000 youths and 15,000 summer jobs, up from the 1996 total of programs for 100,000 youths and 10,000 jobs, according to the mayor's office. The program, including summer lunches, is estimated to cost \$100 million, with the costs to be shared by the city, the schools and Park District.

The enhanced summer plans build on summer library reading programs, summer school, and Park District camps and sports leagues.

At least 490 of Chicago's 553 elementary and high schools will be open this summer to offer educational or supplemental programs, a substantial increase over last year. About 50 schools will be linked to the city's Department of

Environment, and 20 schools will be paired with Gallery 37, the Loop open-air arts center.

The Chicago Public Library System will launch literacy camps for gifted students. The program will focus on creative writing. The camps will be at three regional libraries: Sulzer, 4455 N. Lincoln; Woodson at 95th and Halsted and Mt. Greenwood, 11010 S. Kedzie.

The Chicago Park District will increase to 35 the number of partnerships with local schools to offer more sports programs in addition to the summer camps and activities run by the parks.

Job programs will include placements at the city museums, Argonne Labs and neighborhood companies, the city said. ■

long-prevalent neighborhood-assignment arrangement.

Mary Anne Raywid is a professor

emerita, and Robert Kottkamp a professor, in the department of administration and policy studies at

Hofstra University's school of education in Hempstead, N.Y. ■

63. Education Week

May 21, 1997

High-Tech Schools and Low-Tech Teaching

By Larry Cuban

Technology-minded school reformers, including for the first time in American history the president and vice president of the United States, say that current use of computers in classrooms is meager. It is limited to a small band of serious users, a slightly larger group of casual ones, and the majority who are non-users. Most students in American public schools spend less than an hour a week (or 2 percent to 3 percent of instructional time) at the keyboard. Moreover, when computers are used in classrooms or labs, techno-enthusiasts view the applications (word processing, drill, games, etc.) as unimaginative.

What has to be done, these enthusiasts say, is provide teachers with wired classrooms and machines, give them assistance in selecting and using software, and maintain the equipment. Easy access to technologies and ongoing help will solve the problem, and students will gradually use these powerful machines to open doors to the larger info-world. This is a compelling argument except for one catch: It overlooks what occurs in classrooms when teachers swim in a hospitable sea of technology.

In universities where professors have had almost two decades' experience of using personal computers at home and at the office, where there is much professional help to get them to use computers in their classrooms, the same pattern of limited and unimaginative instructional use of computers turns up. Stanford University serves nicely as an example of what generally occurs in universities across the nation where richly endowed computing resources are uneasily wedded to professors' infrequent use of new technologies in their classrooms.

Some facts about Stanford professors using computers in their classrooms over the past two decades will help.

In the mid-1980s, one study of 125 Stanford professors found that 80 percent

of them used computers to prepare lectures, handouts, and exams. About one-quarter of the professors required students to perform tasks on the computer (such as writing a paper or analyzing a database). When it came to the classroom, however, only 13 professors (10 percent) had actually blended the computer into their classrooms.

In 1989, a survey sent to over 660 faculty members in humanities and sciences found that 94 percent used computers for their research, class preparation, and writing. Between 80 percent and 92 percent of the faculty also had a computer at home.

For teaching, most of the faculty members used computers to prepare handouts (80 percent), design exams (72 percent), and prepare lectures (62 percent). Inside the classroom, however, only 13 percent of the professors used computers for demonstrations; 20 percent used them for computer exercises; and only 10 percent actually used subject-related software.

Another faculty survey in 1994 found even less classroom usage of technologies. The survey went out to 750 professors who taught undergraduates. Fifty-nine percent of the professors said that they never used a computer in the classroom; 19 percent said that they used the machines occasionally; 8 percent said that they used computers often (the remaining responses were unusable).

Two out of three of the professors responding to this survey said that the lack of time to develop relevant software for their courses was a strong factor in their non-use; 45 percent said that they had no time to learn about classroom uses of computers. Yet help from consultants was available in five university centers. Between 70 percent and 90 percent of the faculty responded that they had not used any of these five centers.

Since 1994, much evidence of

frequent use by professors and students of e-mail to discuss questions raised in lectures and seminars has emerged. A few professors have even created multimedia Web pages and made available their courses on the Internet. An imaginatively furnished special classroom for teachers and students has been oversubscribed. Yet, overall, these increasing uses of new technologies occur among less than 10 percent of the Stanford faculty, again revealing the trend of limited in-class use of new technologies.

Here, then, is the puzzle of high-tech schools and low-tech teaching. With so much wealth in resources and a two-decade history of faculty access to machines, software, technical assistance, and professional development, why do college professors display the same pattern of limited and unimaginative computer use in classrooms as public school teachers who have historically lacked these resources? This cross-institutional comparison uncovers the narrowness of how the problem has been framed—teachers' lack of hardware, software, and training—and the emptiness of the popular solution of securing more of each to remedy limited use.

What else, then, beyond resources might explain the puzzling use pattern of these machines by both professors and teachers? I would suggest that techno-enthusiasts consider the following and reframe the problem of limited classroom use of computers.

1. Teaching as work differs from manufacturing, repetitive clerical tasks, and low-skill manual work, which have all been automated to enhance productivity. The essence of teaching is a knowledgeable, caring adult building a relationship with one or more students to help them learn what that teacher, the community, and parents believe is important. It is an intertwining of emotional and intellectual bonds that

gives a tone and texture to teaching and learning that is unlike what occurs in the workplace. The lure of higher productivity in teaching and learning via computer technologies, however, has seduced reformers into treating teaching like any other form of labor that has experienced productivity gains after automation.

What reformers ignore is that introducing a half-dozen machines into classrooms changes social relationships. Teachers' beliefs about their authority, control of the students, and knowledge of what the teachers' role is come into sharp focus when using software that seemingly replaces what normally had been done by the teacher. While some teachers find that exhilarating and rush to accommodate the change in classroom relationships, many others pause to consider the gains and losses to them and their students. It is no accident that computer labs in schools and universities are the most popular way of organizing use of the new technologies; it is the least invasive way of providing access to the machines without disturbing social relationships in classrooms.

Are teachers and professors who raise questions about introducing machines into their classrooms (the current wisdom is securing five to seven desktop computers per class) unreasonable resisters to the inexorable advance of progress? I don't think so. Teaching relies on the human touch to make lasting changes in what students know, can do, and how they behave; it is different from making a car, filing a claim, or wiring a

building. This is, I believe, what the comparison with university professors teaches us.

2. Most techno-reformers are addicted to seeing schools as having only one purpose: to prepare students for the technological workplace. Some see that preparation as consistent with teachers' using a national curriculum and tests; others argue for high-tech, student-centered classrooms as necessary for a changing workplace.

Certainly parents and teachers believe that teaching students marketable skills is important—after all, the historic belief in schools as a social escalator for immigrants, the working class, and the poor remains a tenet of America's faith in public schools. But many parents and most teachers also believe strongly that their duty is to help turn the young into adults who act as caring, thoughtful citizens in a democracy. It is, they believe, their responsibility to help students learn the system, gain access to what a democracy offers, and achieve an adulthood that will both contribute to and improve the community. While such a bald statement of belief in the democratic purpose of schooling hardly stirs more than a yawn from technophiles, it is this value that moves many to enter teaching. Few technology-minded reformers are willing to honor that core value.

3. Why should teachers and professors chuck what they ordinarily do when the new technology is constantly changing? Yesterday, it was getting classrooms wired for the Internet and moving more desktop computers into classrooms.

Today, it is getting portable laptops into the hands of children. Why have everything wired, if you have laptops? With swift changes in the hardware and very little software that is tailored to what teachers are expected to teach, most teachers and professors wisely stand aside from the pell-mell rush to embrace the experts' wisdom of the month.

If technology-minded reformers were to examine their narrow (and, I would add, misguided) beliefs about the nature of teaching, conflicting purposes of schooling, and uncritical embrace of every technical enhancement, they just might think creatively and reframe the problem of low-tech teaching as not one of resources, but a struggle over core values. Reframing the problem would let us see it as a dilemma of conflicting values—those of techno-enthusiasts who seek efficiency and preparation for a computerized workplace vs. those who are unconvinced that higher productivity is better for students or meets the social purpose of building literate and caring citizens. Wiring schools, buying new machines and software, and sending teachers to workshops has little to do with this dilemma. Nor will blaming or shaming teachers into using computers work. Value conflicts seldom succumb to technical fixes. These are honest-to-God dilemmas that need far more debate than they have gotten so far.

*Larry Cuban is a professor of education at Stanford University in Stanford, Calif. He is the author, with David Tyack, of *Tinkering Toward Utopia*. ■*

64. Education Week

May 21, 1997

How Title I Can (Still) Save America's Children

By Robert E. Slavin

The verdict is in, and it's very bad. "Prospects," the national longitudinal study of Chapter 1, was recently released by Congress. Its overall conclusion: Chapter 1 had little if any impact on the achievement of the children it served. ("Chapter 1 Aid Failed To Close Learning Gap," April 2, 1997.)

The danger in this finding is obvious. In a time of budget-cutting and downsizing of government, a multi-billion-dollar program with little evidence of effectiveness is certainly at risk. At more than \$7.2 billion per year,

Title I, the successor to Chapter 1, is by far the largest federal investment in elementary and secondary education. It is the bedrock of federal attempts to assist schools serving many disadvantaged students. When effective programs are used in high-poverty schools, it is almost always Title I that pays for them. Maintaining Title I funding for high-poverty schools is essential. Yet it is impossible to justify continuing to spend Title I dollars on services that don't work, can't work, and have never worked.

The problem is that Chapter 1 funds

were overwhelmingly used for two purposes: to hire teachers to provide remedial services to children who had fallen behind, and to hire aides to work in classrooms. These uses have rarely if ever been found to be effective. This is not to belittle the skills and dedication of Title I teachers and aides, or even the need for them. It's just that they've been given the wrong jobs to do. In fact, there is evidence that both pullout teachers and aides can be effective in providing one-to-one tutoring to at-risk children, and many programs that do have

33. Miami Herald

May 20, 1997

Task force votes against school boundary

By GRACE LIM
Herald Staff Writer

A joint task force that includes Dade School Board members and county commissioners voted 5-4 Monday to recommend that the board abolish its no-build boundary in far West Dade.

The vote could be a boost for School Board member Manty Sabates Morse, who is sponsoring a proposal at Wednesday's board meeting to abolish the imaginary line, which was drawn seven years ago to discourage urban sprawl.

The school boundary line runs about a mile inside, or east of, the county's urban development boundary — the cutoff point for almost all new housing.

Board members drew the line with the intention to not build any schools west of it.

Since then, western schools have

become very overcrowded and the board itself has been reconstructed, with members now elected from districts.

"This line serves no purpose whatsoever for Dade County Public Schools," Sabates Morse said at Monday's meeting.

A compromise offered by Metro Commissioner Miguel Diaz de la Portilla was rejected, 6-3, by the group. He wanted to modify the line to allow some construction of schools, and give School Board members the right to purchase or accept donated land west of the boundary on a case-by-case basis.

"We're not going to get additional schools in West Kendall or South Dade or anywhere else in Dade County by eliminating the school development boundary line," he said. "That is a

myth."

Voting to recommend the line be abolished Monday were Sabates Morse, Jay Chernoff of the League of Cities, Andrew Dolkart of the Greater Miami Chamber of Commerce and Carl Durnberg of the United Teachers of Dade and Stanley B. Price, a zoning lawyer who represents the construction industry.

Opposing were Diaz de la Portilla and fellow Metro Commissioner Katy Sorenson, School Board member Renier Diaz de la Portilla, and Betty Noe of the PTA/Citizens Coalition for Public Schools.

"I see this recommendation as a reversal of management growth policies that so helped our overcrowding situation the last three or four years," said Renier Diaz de la Portilla. ■

34. Casper Star-Tribune

May 19, 1997

U S West helping schools obtain technology grant

CHEYENNE, Wyo. (AP) - U S West is helping Wyoming schools and libraries improve their chances at a share of \$2.25 billion in federal technology funding.

U S West - a regional Internet service provider - is providing technical help to groups interested in applying for the technology funds.

The Universal Service Education Fund helps students connect with the Internet, communication services and technology.

"Educators across the country will be moving fast to get these funds," explained Stan Bader, vice president of U S West Communications in Wyoming.

U S West held a statewide video conference with Wyoming educators and

library officials last week to discuss the types of services and funds available.

"We want to make certain that schools here get a running start with the information and resources they'll need to bring this funding home to help students," Bader said.

He said Wyoming's schools "should be second to none when it comes to understanding computers and how to search and retrieve vast amounts of information on the Internet."

The Federal Communications Commission recently decided to make \$1 billion available immediately and another \$1.25 billion available during the second half of the year.

In 1998, \$2 billion will be available

on a first-come, first-served basis, said Mike Ceballos, U S West's director of public policy. After that, \$250 million will be used to provide funding for schools and libraries that can demonstrate the highest degree of need.

Ceballos said the technology grants themselves - which are aimed at kindergarten through 12th grade students - do not have a maximum amount. But, he said, the grants can be used only for certain services.

As part of its "Connected Schools" program, U S West has offered to counsel districts interested in applying for the federal money.

The deadline for applications is July 1, Ceballos said. ■

35. Baltimore Sun

May 20, 1997

Agency shares secrets to math

Education: The shadowy NSA is taking a very visible role to help students decipher some of the finer points of mathematics.

By Howard Libit
SUN STAFF

For a government agency that refused to acknowledge its existence until a few years ago, the National Security Agency (NSA) is making itself well known these days in Maryland's schools.

NSA employees can be found in math classrooms throughout the Baltimore-Washington corridor. The agency supports summer institutes for math teachers and students. Pupils in dozens of Maryland schools use former NSA computers and equipment — with the top-secret files removed, of course.

"In just a few years, they've become an invaluable partner in mathematics education in Maryland," says Janie Zimmer, who oversees mathematics instruction in Howard County schools. "They've done a phenomenal job showing students the practical applications of mathematics."

Given that the agency's initials once were said to stand for "No Such Agency," the decision to assume a high-profile role in Maryland education didn't come easily — particularly because the idea was first considered in the late 1980s, before the Cold War ended.

"NSAers just didn't go out into the community," recalls John R. Pettit, director of the Fort Meade agency's Mathematics Education Partnership Program. "This was a decision that took a lot of soul-searching and a lot of discussion."

But as the nation's largest employer of mathematicians, "The agency was very concerned about the future of mathematics education," Pettit says.

National and international studies indicate that the math skills of American students trail those of students in many other countries, and "we are worried about that," he says.

It didn't hurt that the NSA was considering the idea at the same time Congress and the president were encouraging federal agencies to be more active in communities and education, he says.

What began in 1991 as an NSA working group on kindergarten through 12th-grade math education has grown into an extensive program that helps teachers design lesson plans, finds tutors to give students one-on-one support and even takes over entire schools for a day of lessons. All of the NSA employees are volunteers who are given time off from work.

In a math class at Severn Elementary School one recent afternoon, NSA computer programmer Mike Blasi showed fourth-graders about probability, using coins, dice and the board game "Monopoly" to illustrate chance and fractions.

"If you understand a little more about probability, you'll end up winning more games and

beating your friends more often." Blasi promised the Anne Arundel County 9-, 10- and 11-year-olds.

Blasi held their attention through three 45-minute lessons. "It was neat seeing someone who actually uses math," said fourth-grader Marla Muha, 10.

The lesson meshed perfectly with the instructional goals of the Maryland School Performance Assessment Program (MSPAP), the state's annual tests of schools' quality, said Maureen Maidhof, Severn Elementary's fourth-grade math teacher. Students were asked to work in teams to think through problems and write out their answers, like on the MSPAP.

"That's our main goal — to support the math programs of local school systems and the state," says Julie Dunbar, an NSA program analyst who is assigned to the math education project.

The NSA publishes a catalog of dozens of topics that its employees can teach.

They range from the most popular — an edible elementary lesson involving M&Ms, estimating and graphing — to those involving the real world — a high school lesson showing the mathematical model used to manage cleanup of the Exxon Valdez oil spill in Alaska.

In Howard County's Elkridge

Elementary School recently, more than a dozen such lessons were given during a full day of math instruction for the students.

As Dunbar introduced Elkridge kindergartners to glyphs — graphical illustrations of data common on the MSPAP — another NSA employee showed students how to use protractors to bisect lines.

"I think it's important to show the students why they need to learn math," says NSA mathematician Brad Garner. "They need to see that math has a lot of very practical applications."

During the 1995-1996 school year, NSA employees gave 770 talks at almost 150 schools, primarily in Anne Arundel, Howard and Prince George's counties. This school year, they're on pace to exceed that number, in part because the agency has been sending speakers to schools in Baltimore as well.

Apart from the speakers bureau, NSA employees are active in partnerships with about 80 schools throughout the area, as well as in Southern Pennsylvania.

At Arundel High School, NSA employees help students prepare for the high-level American High School Math Exam competition, assist in grading problems for calculus classes and tutor students who are struggling.

"They've helped us however they can," says Arundel High Principal William Myers. "Anything we've asked for, they've found a way."

In addition, NSA employees help sponsor math contests for Maryland students, a math- and science-oriented summer camp for students on the Eastern Shore and several teacher training institutes. Teachers at those institutes develop math lessons that are distributed to schools across the country.

"Math is still looked down on sometimes as being an abstract language, but when you can show students something involving cryptology, that's fascinating to them," says Donna Crabbe, a math facilitator with the Maryland State Department of Education. "It's the kind of thing that persuades them to keep

she said she was hurt by a comment Stanford made on May 7 that he agreed with the advocacy council's purpose of advocating fair treatment of gays and lesbians, but not one of its goals, which

aims to "increase visibility of positive role models for sexual-minority students."

Stanford said he found the council's goal confusingly phrased, and that he

supports school employees who wish to be openly gay or lesbian.

"Any employee that wishes to say that, they will be supported by me," Stanford said. ■

28. Milwaukee Journal Sentinel

May 20, 1997

Wiring schools creates debate

Experts disagree on spending millions to wire classes for Internet

By Jim Stingl and Dave Umhoefer
of the Journal Sentinel staff

Jesus Santos is excited about launching his fifth-grade students at Fratney St. School into cyberspace with more computers and better access to the Internet.

Michael Bloomberg, founder of a financial data service that provides information to investors at lightning speed, thinks computers in schools are a waste of money and a distraction from the basics of education.

In the debate over the wisdom of spending hundreds of millions of dollars on wiring public schools to get on the Internet, the enthusiasm of Santos has far more support than the cautionary opinion of Bloomberg, which he admits must sound like information-age heresy.

Gov. Tommy Thompson and the Legislature have announced agreement on a \$206 million down payment toward the huge statewide wiring project. The money would come from tax revenue and a surcharge on local telephone bills. The total cost over the next six years could run \$600 million or more.

Santos said the vast majority of the students at the Milwaukee school where he works don't have access to computers outside of the classroom. And there are only two computers at the school hooked to the Internet, far fewer than needed.

"I definitely feel it's a positive movement to have the kids engaged in computers, especially if they have access to the Internet because of the types of information that kids can get their hands on," he said. "Being computer literate is going to be required for most jobs that are available in the future."

Maybe so, but high school is soon enough to start training kids on computers, said Bloomberg, head of Bloomberg Financial Markets. He was in Milwaukee earlier this month and shared

his beliefs about computers in schools during a speech before the Milwaukee Press Club.

"The real question, particularly for real young kids, is why do they need Internet access? Why do they need computers?" Bloomberg said in a telephone interview Monday. "Young kids need to learn reading, writing and arithmetic. They need to have personal relations with human beings, with teachers that can understand them and talk to them and hold their hand and guide them emotionally."

"The money for the technology comes out of the funds that would otherwise get us better qualified teachers and smaller class sizes. I don't know of any computer skill a kid is going to learn that is worth anything five years from now, much less 10 or 15 years from now when they go to work," Bloomberg said.

There are few critics of the need to recognize the Internet's power in educating today's kids and get schools ready to use it. But school administrators recognize that they must get teachers up to speed and keep them there or technology can be a waste of money and do little to improve student achievement.

"I believe that very few districts have gone the next step to integrate the technology into their curriculum," said Neah Lohr, a state Department of Public Instruction official who works with districts on technology issues. "That's the hard part. Anyone can order the hardware."

Another DPI official, Bob Bocher, said the fiber-optic wiring of classrooms would serve schools well for many years regardless of technological revolutions to come.

"If you wait until technology stabilizes, you'll be waiting forever and

you won't get anywhere," Bocher said.

Larry Landweber, a professor of computer science at the University of Wisconsin-Madison and chairman of the Internet Society, agreed that the investment will provide long service.

"Remember, what you're buying here is access with this program. You're always going to have access. Eventually the wire that goes to the school will carry more bits per second than it does at first. But that's not going to require necessarily changing the wire."

State Sen. Robert Jauch (D-Poplar), one of the program's backers, said the system was designed to be easily adaptable to rapid changes in technology. Jauch thinks students will benefit from the interactive capabilities of computer-assisted teaching.

But even technology's most ardent supporters, such as MPS principal Spence Korte at Hi-Mount Elementary, caution school districts to remember that teachers are the most important software in a classroom.

"As much as I love technology I'd give it all up for a guarantee of 20 master teachers," said Korte, whose school pioneered widespread personal computer use in MPS in partnership with business. Korte said Hi-Mount has a computer for every two students and Internet access in every classroom. He believes the state's plan is a good investment.

Barbara Miner, managing editor of Rethinking Schools, an independent education newspaper based in Milwaukee, said computers in classrooms won't make every student succeed, but they're here to stay.

"Kids need to have technological skills to survive in the world. Technology is not going to go away. Particularly if you're dealing with student

populations that may not have this technology at home, if you don't provide

it in school then they're really going to be

behind the eight ball," Miner said. ■

29. Associated Press

05-20 6:41a

College founded by famous televangelist has last graduation

BIG SANDY, Texas (AP) - A college founded a half-century ago by famed evangelist Herbert W. Armstrong has held what it says is probably its final graduation.

More than 350 candidates received bachelor's or associate's degrees Monday at Ambassador University at Big Sandy, 100 miles east of Dallas.

The school, whose enrollment was about 650, plans to shut its doors on August 31. The college has been hit by financial difficulties and declining enrollment. Church officials said in December that the college would be closed after the spring semester unless a buyer could be found.

However, university spokesman Brian Tyson said Monday that the school would offer a limited number of courses and hold a three-week youth camp this summer.

The campus has no potential buyers "at this time," Tyson said. Unless the university is sold "as a going institution," it will close Aug. 31 and the physical plant will be sold, he said in a prepared statement.

It once was called Ambassador College. Armstrong founded the school in 1947 at Pasadena, Calif. He used radio, television and magazines to spread the word of his 80,000-member Worldwide Church of God.

The church received strong financial support that made it a powerful evangelistic organization. The Plain Truth and Quest magazines and "World Tomorrow" television programs are part of the ministry, which is still based in Pasadena.

Armstrong died in 1986 at the age of 93. His son, Garner Ted Armstrong, was the heir apparent of the church until the

two had a falling out in 1978. The elder Armstrong excommunicated his son after the younger Armstrong publicly denounced what he called the church's lavish expenses.

The younger Armstrong then began his own independent ministry in Flint, about 10 miles south of Tyler, called the Church of God International. He stepped down in 1995 after allegations of sexual assault, which he denied.

The campus of more than 350 acres includes an airstrip, golf course, homes for faculty members, and a farm.

The potential shutdown of the school, on U.S. Highway 80 near Big Sandy, could have a major financial impact on the town of 1,200.

The university, which had about 150 employees when its possible closing was announced, will have only a "skeleton staff" after Thursday, Tyson said. ■

30. Baltimore Sun

May 20, 1997

Schools to get recycled funds

Repairs to be made at 55 aging buildings in Baltimore County; \$1.8 million reallocated; Money also will go to Parkton firehouse, Catonsville planning

By Larry Carson
SUN STAFF

Fifty-five Baltimore County schools will get badly needed repairs faster after the County Council voted informally last night to recycle \$1.8 million in proposed budget cuts.

The county funds will supplement a similar amount of state money already promised to help aging county schools, and will be added to another \$1.6 million the council trimmed from the proposed budget.

Last week, the council decided to recycle the \$1.6 million by spending it on major repair projects at five other aging schools.

Another \$137,500 in budget cuts will be reallocated to assign paid county firefighters and place a fire engine in the Parkton firehouse by July to help north county volunteers, and another \$100,000 will provide planning money for a group trying to decide what to do with the former Catonsville Middle School on Bloomsbury Avenue.

The council is to formally vote on its overall list of nearly \$3.7 million in cuts from the proposed \$1.5 billion budget for the fiscal year beginning July 1 at a special meeting Friday. They can cut, but not add to the budget, so the decisions were made in concert with County Executive C. A. Dutch Ruppersberger.

The school projects range from replacement of exterior lights at Fort Garrison and Pinewood elementary schools — at

about \$5,000 each — to quarter-million-dollar heating and ventilation projects at Lansdowne Middle and Relay and Logan Elementary schools.

In between are several other projects such as replacing library carpeting, cleaning air vents, getting new doors and gym bleachers, replacing bathrooms at Parkville High and refinishing floors that would otherwise have waited another year or two to be done.

"You can't put it into a better place

41. The Tampa Tribune

May 20, 1997

Schools to get phone bill discounts

An Associated Press report

TALLAHASSEE - Florida schools and libraries can get up to 90 percent off on in-state phone charges, saving millions of dollars to use for better computers and Internet hookups, state utility regulators said Monday.

For children, it is the difference between an entire class sharing a single terminal with a teacher and having multiple Web links available for regular use.

The Federal Communications Commission approved the discount plan earlier this month, in effect expanding the concept of universal service that earlier in the century consisted of affordable telephone service for every family.

Florida schools and libraries may apply in July for discounts that will start in January, paid for by a \$2.25 billion a year federal fund, raised through monthly charges to homes and businesses with more than one telephone line.

"Computers are no longer something you get to use if you are doing good. It's now a matter of being competitive and prepared for the job market vocationally," said Bill Piotrowski, information services director for Leon County schools. "We're ready to extend our capacity right now."

State Public Service Commission Chairwoman Julia Johnson said the plan will provide 20 percent to 90 percent discounts off of all telecommunications services for schools and for libraries.

"We have the opportunity to provide access for schools and for libraries to the information superhighway," she said.

To ensure that children in rural and disadvantaged areas benefit, the sizes of the discounts are keyed to numbers of pupils eligible for free or reduced-cost school lunch programs in a district.

About 65 percent of Florida schools could get discounts as large as 60 percent to 70 percent on their

telecommunications bills, Education Commissioner Frank Brogan estimated.

The rest will qualify for 20 percent to 50 percent off, he said. "This will result in millions in savings for our schools."

"Based on current Internet access rates we estimate that a school eligible for an 80 percent discount will save over \$4,200 annually on Internet service alone," Brogan said.

The PSC has not yet analyzed every district's telecommunications charges to gauge the dollar amount of the discounts statewide.

The largest district, Dade County, which is eligible for an 80 percent discount, is expected to save \$288,000 a year, Johnson said.

"That will mean that resources will be freed up to buy more computers, to train the instructors," she said. "It's an opportunity to leverage and use federal dollars to do something good for our citizens." ■

42. Philadelphia Inquirer

May 20, 1997

12 N.J. firms will recruit off welfare

Priority for jobs is guaranteed. The actual jobs aren't.

By Thomas Ginsberg

INQUIRER TRENTON BUREAU

TRENTON — Executives from 12 companies, including United Parcel Service and Bell Atlantic, pledged yesterday to consider recruiting people from the state's welfare rolls for the 7,000 new entry-level jobs they expect to fill this year.

The voluntary effort would not guarantee any jobs for welfare recipients. It would give them priority, executives said, for the full- and part-time positions with medical benefits.

The work would range from climbing

telephone polls and repairing computers to answering calls for customer service and serving hot dogs at sporting events.

The effort, named "Corporate Partners," is the first public-private initiative Whitman has announced under her sweeping Work First New Jersey welfare overhaul, enacted as part of last year's federal welfare reform.

The initiative couldn't come soon enough. Under federal law, New Jersey, like every state, must enlist a quarter of its welfare recipients in "work activity" at least part-time by October, or lose millions in federal dollars.

The governor, who is running for re-election in November, stood in front of cameras with the executives, thanked them for their promises of help, and handed each a "Corporate Partner" certificate — a ceremony tailor-made for election campaigning. Whitman's law defines "work activity" broadly, including unpaid community service without benefits, part-time work, a regular full-time job, and even a job search.

Currently, about 385,000 people depend on welfare in New Jersey. ■

43. Associated Press

05-20 4:56a

Harshbarger proposes tightening of child labor laws

By MARTIN FINUCANE

Associated Press Writer

BOSTON (AP) - Teen-agers swamped with both work and school would get a break under a proposal developed by a task force on child labor.

The task force, whose final report was to be unveiled this morning by Attorney General Scott Harshbarger, calls for reducing the number of hours from nine to four that 16- and 17-year-olds can work on school days.

"We are offering young people the chance to learn the value of work without compromising their education," Harshbarger said in a statement released Monday.

"We are recommending changes that seek to strike a modern balance between school, work and the reality of today's economy," he said.

Harshbarger convened the task force to scrutinize the state's 50-year-old child labor laws. The task force included lawmakers and representatives from business, labor, public health and education.

The task force is recommending limits on daily and weekly work hours for teens on school and non-school days, increased penalties for violating the law and streamlined work permit procedures.

Business interests were dissatisfied with the limit on 16- and 17-year-olds' daily hours.

"We just think it went a little bit too far," said Jon Hurst, president of the Retailers Association of Massachusetts.

The four-hour limit for school-day work "doesn't really fit into the schedule for worker and employer," he said.

Hurst said many employers want

young people who begin work after school to continue all the way up to closing time and that could be difficult if their shifts are limited to four hours. A six-hour shift would be better, he said.

Children 13 and under aren't allowed to work. On school days, 14- and 15-year-olds are currently allowed to work only three hours, said Hurst, who was a member of the task force.

Harshbarger was to present the recommendations of the task force to the Committee on Commerce and Labor today.

Some studies have shown that only a fraction of younger teen-agers in the state work long hours. A state Department of Education survey in 1994 found that only 5 percent of 10th-graders statewide worked 21 hours a week or more. ■

44. Associated Press

05-20 5:13a

High school kid's brainy research insights recognized by Endocrine Society

LOS ANGELES (AP) - Meet Christopher Pietras, a classic overachiever who has put the science world on its ear.

The 17-year-old has won recognition from the prestigious Endocrine Society for a research paper that suggested a natural protein called neuregulin might play a role in stimulating brain cells to reproduce.

"That's exciting," said Dr. Lorraine Fitzpatrick, a professor at the Mayo Clinic and a consultant to the Endocrine Society. "If we could figure out how to make brain cells divide, it could mean a great deal in working with brain injuries of all kinds - strokes, Alzheimer's, spinal cord injuries."

Pietras' work is preliminary but intriguing, Fitzpatrick said.

"It's a small step in science," he said. "But it's a giant step in the right direction."

Pietras is a lanky senior who lives with his parents in suburban Sherman Oaks and attends private Harvard-Westlake High School in Studio

City.

As if conducting potentially groundbreaking scientific research wasn't enough, the lanky senior is the top student in the high school's jujitsu class and is trained in shiatsu massage, a product of his interest in martial arts.

He's also taking advanced courses in psychology and studio art and has a grade-point average for the year of 4.4, higher than the usual maximum of 4 because he earns extra points by taking advanced-placement classes.

Pietras' parents are doctors and researchers at the University of California, Los Angeles and he did his brain research at a UCLA laboratory.

"This is a super-smart kid. But he's also such a nice guy, so easygoing. It was nice to have him around," said Dr. Mark Pegram, a researcher at UCLA's Jonsson Cancer Center.

Pietras will discuss his findings at the Endocrine Society's annual meeting next month in Minneapolis.

"This has been so much fun. Finding conclusions in science is a really

wonderful thing," Pietras said.

That interest helped propel him into brain research.

"I wanted to see if acupuncture works on the molecular level," he said.

Among other things, Pietras cultured human nerve cells, examined them under an electron microscope and tested them for DNA synthesis.

The findings indicated cells treated with neuregulin would divide, although more complex experimentation is needed.

"This is very important to understand - until Chris or another scientist takes that all-important next step of finding a biochemical signal to make neurons divide, Chris' work must be considered preliminary," Pegram wrote in a statement by UCLA describing the experiment.

"It is important basic science, but at this point it is in no way applicable to clinical medicine."

Pietras, meantime, is preparing for college. He's enrolled at UC Berkeley, where he plans to take a number of

24. The Washington Post

05/18/97; Edition: FINAL; Section: Metro; Page B01

Computer Access Found to Vary Widely In Fairfax Schools

By Robert O'Harrow Jr.

Washington Post Staff Writer

Student access to computers varies widely from one Fairfax County school to another, according to a new survey that has heightened school officials' concerns about inequities in the current system for buying classroom technology.

The survey found that about two dozen elementary schools in the county have roughly one computer for every three students, while 15 other elementary schools have one computer for every seven students or more. Similar gaps exist among middle and high schools, according to the survey, the largest technology inventory the school system has ever conducted.

Officials also found that some schools have mostly older computers, while others have a rich supply of advanced machines.

Such disparities are a growing source of anxiety for educators in Fairfax, Montgomery, Prince George's and elsewhere in the Washington area, as a growing body of research shows that computers can improve how children learn.

In most area systems, school officials have lacked the funds to buy enough up-to-date computers in recent years and have come to depend increasingly on private fund-raising at each school.

As a result, schools with aggressive, technology-oriented PTAs or ties to local businesses have continually acquired new equipment, including multimedia computers and laser printers, while poorer or less motivated communities have lagged behind.

Although a national study issued last week concluded that children who are poor or members of minority groups generally have far less access to computers, the Fairfax inventory did not find any clear connection between the number of computers at a school and the racial or economic makeup of the student body.

The gaps uncovered by the Fairfax survey have an impact on classroom learning, educators say.

At a technology-rich elementary school such as Bailey's in Falls Church,

which has one computer for every 2.2 students, students use the equipment almost daily for math, social studies and other instruction.

But in elementary schools at the other end of the spectrum, such as Centre Ridge in Centreville, which has one computer for every 11.6 students, children have to wait longer to use computers, and many of the machines can't run sophisticated programs or connect to the World Wide Web.

At South Lakes High School in Reston, which has more than twice as many students per computer as Marshall High School in Falls Church, Principal William Harper said his students are at a clear disadvantage.

"They don't have access to data that other kids have. It takes them longer to write papers, and it's just not as fun," said Harper, who recently developed a plan that estimates the school needs \$200,000 to improve the situation. "It limits the ways in which kids learn."

School officials in Fairfax, the Washington area's largest system, said they are troubled by the survey results but uncertain how to solve the problem.

Although the school board has approved spending \$32 million on technology this year and next — the largest such appropriation the county has ever made — that amount is "nowhere close" to being enough to even out the differences and adequately upgrade equipment, said board Vice Chairman Mark H. Emery (At Large).

"It will be a major challenge to address the equity issue," Emery said. "We're still at the infancy stage. Most school systems are."

School officials in Montgomery and Prince George's said that although they do not have information as detailed as Fairfax's, they are aware of similar inequities within their school systems.

One politically difficult decision facing area school boards is whether to buy a lot of computers for the schools with the fewest machines or spread around the purchases so that all schools will have some new equipment.

Montgomery officials decided three years ago to begin an effort to equip

every school library with at least five high-speed computers capable of doing what virtually any student would want. "We are trying to provide some measure of equity in every school," Joseph Villani, an associate superintendent, said of the \$75 million Global Access initiative.

But the system is spending only about half of what the plan originally called for each year, Villani said. And critics say it would be better to focus on helping the schools in the poorer communities where many students do not have computers at home.

"There are parents here whose households have three, four, five computers. So that's not equity," said Joseph Hawkins, a program evaluation specialist for Montgomery schools. He said the system should conduct its own comprehensive survey to better identify the schools in need. "We have to show some leadership and moral backbone."

Last week's national report by the Educational Testing Service found that on average, schools in Virginia, Maryland and across the country have roughly one computer for every 10 students.

Fairfax, Montgomery and Prince George's school systems all have better ratios — one computer per four students in Fairfax, one per five students in Montgomery and one per eight students in Prince George's. The U.S. Department of Education recommends a ratio of one computer for every five students.

The Fairfax study also looked at the quality of each school's computers. It found that 20 of the county's 134 elementary schools had at least three times as many newer computers — defined as IBM 386s or better — as older models. But 30 other elementary schools had more older models than newer ones.

At Stone Middle School in Centreville, for instance, only about 74 of 236 computers were considered "high-end." At Robinson High School, about two-thirds of the 592 computers were in that category.

Virtually every Fairfax school will be connected to a wide area network with Internet access by this fall. But many

school computers will not be able to tap into the network.

Of the school system's 37,000 computers, only 11,000 are capable of accessing the World Wide Web easily and using new sophisticated software. To replace the other 26,000 machines, Fairfax would have to spend almost \$42 million. Maintenance and teacher training would cost tens of millions more, school officials said.

Fairfax officials said such a massive overhaul is not immediately necessary because many of the older computers still are used effectively. But they

acknowledge the machines will have to be replaced eventually.

School officials in Montgomery and Prince George's also said that many of their computers can't run new software or perform other tasks increasingly required by teachers and students.

Educators at schools relatively rich in computers said the equipment makes a big difference, in some cases giving children from low-income families their only access to the machines.

"It's wonderful," said Carol Franz, the principal of Bailey's Elementary, an arts

and sciences magnet school whose student population is one of the poorest in the county. Two-thirds of the pupils at Bailey's receive free or reduced-price lunches.

The school has gotten extra support from the school system and obtained other computers through donations from businesses, parents and other sources. It has 855 students and 386 computers, three-quarters of them "high-end," according to the inventory. "We've been very fortunate. They're very valuable," Franz said. ■

25. The New York Times

05/18/97; Edition: Late Edition - Final; Section: Section 13CN; Connecticut Weekly Desk; Page 1, Column 1

The 40-Minute Class, Out Like Bobby Socks

By CAROLYN BATTISTA

REMEMBER high school? Remember heading for the hall every 40 minutes or so, as class periods changed? And the parting yells from teachers: "For homework, do those 15 questions!" as they prepared for yet another wave.

With each passing year, high school students are less likely to hit the halls so often, or to take a full school year of English or algebra in daily, 40-minute doses. In Connecticut as elsewhere, many high schools are adopting what's called "block scheduling" — with classes about twice as long as traditional ones meeting fewer times per week or for only part of the year.

Educators say that such scheduling wastes less time, creates a calmer atmosphere, and lets everybody concentrate, focus, delve into things. It allows time for varied activities and complex assignments, not just lectures followed by 15 questions, and time for teachers and students to get to know one another.

A few Connecticut high schools now operate entirely with block classes; more have at least some. Others will soon start them, full or part time, and many more are considering them. "Block scheduling is probably the hottest topic in high school education right now," said Marie Diamond, president of the Connecticut Association for Curriculum and Development.

What's happening, said Helen Regan, a professor of education at Connecticut College in New London, is that "in every discipline, there's a change in teaching to

engage students at a deeper intellectual level." A 40-minute class — starting up, settling down, packing to leave — "doesn't lend itself to in-depth projects or student-centered activities," like one in which students plan a science experiment, conduct it, collect data together, then individually interpret the data. She added that teachers can better plan and grade complex projects when they see fewer students each day. (With traditional scheduling, many teachers see 125 students, in five different classes, every day.)

"Two models of block scheduling are sweeping Connecticut, New England, and even the country," said Dr. Regan. Both have classes of 80 to 90 minutes, but the classes meet every other day, all year, in the "alternate day" model, and every day for only one semester in the "four-by-four" model (so named because students take four courses the first semester and four other courses the next). Alternate-day scheduling is often considered good preparation for college, while the four-by-four model is sometimes favored for allowing everyone to deal well with a few subjects at a time.

Of course nothing is perfect. One concern is that block scheduling may achieve depth at the expense of breadth; another is that students may not retain information as well when time between classes is longer.

Connecticut schools that have begun block scheduling, however, say that while it definitely requires some effort, there are more pluses than minuses.

East Lyme High School is now in its second year of full-time alternate day scheduling; Holy Cross High School in Waterbury is in its first. Tolland High School is in its first year on a full four-by-four schedule. All plan to continue.

"Now we have sustained time with kids," said Gerald Mistretta, the principal. "The atmosphere of the school is much calmer, and teachers and students feel more connected." Other results, he said, include fewer discipline problems, more students on the honor roll and lots of visitors. This year groups from more than 75 schools, all considering block scheduling, have come to see it in action.

At East Lyme, a math teacher, Linda Johansen, said that with longer periods, she can work more with each student. "I know much quicker where strengths and weaknesses are," she said. She can also deal more personally with disruptive students, she said.

A science teacher, Brian Neylon, looked on as his students did a lab project. "This used to take two days; you'd set up and break down two times," he said.

Richard Chiapetta, music teacher and band director, welcomed more time to explain things, to get things right. "I find my kids are practicing more," he said.

A Spanish teacher, Maureen Epps, said her students were speaking more Spanish and carrying out more projects, like producing plays in Spanish.

Students generally favor the longer classes, but noted a few drawbacks. "You

"It is ironic that if we could magically produce 10 computers per classroom ... most could not be plugged in due to lack of electrical outlets sufficient to handle the load," a recent survey by the Connecticut Association of Boards of Education found.

The variety and freshness of electronic information excites educators such as John Coster, Winsted's technology coordinator.

"Think of it," he said. "The Internet right now is the largest, most dynamic library ever. All that information is available in your classroom."

Of course, the Internet also has an ample share of drivel. Anyone with a PC and an opinion can crank out misinformation on everything from slavery to Saturn's rings. Students and teachers, Coster said, must learn how to analyze electronic information — to select what's useful and discard what's not.

"Back when we were in school, you got the basic facts," Coster said. "Now, there's so much information you've got to have honing skills to be able to zero in on the information you need."

There are some who question whether

all the money being spent on computers is worthwhile at all. Two critics, David Gelernter, a computer science expert at Yale University, and Stoll, an astronomer from Oakland, Calif., and a self-described "computer jock," are hardly Luddites.

"What's the most important thing in the classroom? A good teacher and motivated students," said Stoll, who wrote "Silicon Snake Oil." "Anything that separates them, whether it be filmstrips, an instructional video, an interactive Web site, an Internet feed ... the students are going to love because it's lots of fun. But it's going to be of dubious value for learning."

Computers have been welcomed uncritically into education, Stoll said. "No one has ever asked obvious questions. Do we need them? Will they make our schools better or worse? Will they create students who love to learn or will they create students who love to click on a mouse?"

As for the Internet and claims it opens up a whole new world of information to students, Stoll says "Hold on."

"Ask any teacher, 'Do you need more information in your classroom?' Time

and time again, the answer will be 'No, I've got all the information I need. I need more time for my students, more prep time, more time one-on-one with each student. Computers steal that time away from me.'"

A recent survey of teachers nationwide found a certain level of skepticism about the usefulness of the Internet to education. The survey, performed by Market Data Retrieval of Shelton, also found that most students, about 81 percent, use the Internet for browsing while fewer than 12 percent take advantage of its "much-heralded potential for global communication and learning."

Instead of requiring teachers to learn computers, Stoll suggests teachers spend their time focusing on their disciplines.

"I'd rather my teachers spent their spare time learning about English, history, American society, mathematics and chemistry rather than learning about computers," Stoll said.

Courant Staff Writers Jesse Leavenworth, Rita A. Niro and Michael Greenwood and Courant Correspondent Eric Ferreri contributed to this story. ■

66. The Hartford Courant

May 18, 1997

Many teachers lack computer training

By MARIE K. SHANAHAN This story ran in The Courant on May 18, 1997

In school systems across the state, it is common to find educators such as Nancy Allison lamenting a lack of computer training.

Allison, East Hampton's computer coordinator, describes the training in her district as "definitely inadequate" and becoming even more so as the technology keeps changing.

"I know DOS, Mac and Windows, and now I have to learn Windows 95," Allison said. "It's much worse for the teachers, especially the ones who don't even have a general knowledge of computers."

Other school systems, such as Granby and Windsor Locks, offer so few technology workshops that motivated teachers who miss out are reduced to taking classes on their own or practicing on home computers.

Some even learn about computers from their students.

Though computers have become indispensable in most businesses and many homes, a majority of public school teachers are still unable to use the technology in their classrooms.

The big-buy decision: IBM or Apple
In Torrington, when one teacher insisted that the computer in her classroom didn't work, the school system's technology consultant discovered it wasn't plugged into the wall jack.

A March survey of 129 school districts by the Connecticut Association of Boards of Education uncovered these facts about teachers' use and knowledge of technology:

- * Few educators can effectively use basic computer applications such as database, spreadsheet or Internet software, although word processing is widely used.

- * There is not adequate training in most districts to teach teachers how to use computer software proficiently, with the exception of word processing.

- * More than half of the personnel in most schools are unable to use the Internet as a teaching tool.

Some teachers have been unwilling to use computers, saying they are not convinced "high-tech bells and whistles" help students learn any better.

But most teachers just lack training and access.

"Whenever you introduce something new, people are afraid of it. Computers, the Internet ... it's a big thing — another thing for teachers to learn on top of everything else they have to do," said Patricia Jacqueline, an English teacher at Windsor High School.

Training is so inadequate that it raises the question of whether millions of dollars invested in computers is being wasted.

"Without teacher training in place, schools run the risk of having a technology infrastructure that no one knows how to use," said Alfred Hopkins, assistant executive director of Area Cooperative Education Services in Hamden, one of six regional education associations in the state.

"You have to bring people to a high level of confidence in their abilities so they can use the equipment to teach students," Hopkins said. "Otherwise, what's the point?"

Recognizing the problem, school officials in Bloomfield put off all new computer purchases this year until teacher training catches up.

The National Information Infrastructure Advisory Council — a panel of information experts, educators and community members created by President Clinton — estimates a teacher needs at least 30 hours of training to use computers at a basic level. Mastering the technology requires more than 60 hours of training and two years of experience, the council concluded.

But in most Connecticut schools, teachers get just a few professional days a year and that may include only a few hours for computer training.

In Hartford, for example, teachers are usually offered computer training only when hardware or software is first purchased, said Jeffrey Forman, the city's assistant to the superintendent of schools.

Forman said some training sessions are offered during the school year and the summer, but the training is not nearly as organized or as frequent as officials would like.

A study released in January by the state legislature's Task Force on Educational Communications revealed that Connecticut's investment in technology infrastructure and training lags significantly behind other states'.

Ohio provides \$125 million for technology training for teachers. Mississippi requires that 20 percent of the funding for its \$26.8 million technology enhancement act be spent on teacher training. And in Florida, schools that are awarded part of a \$55-million technology incentive program must spend at least 30 percent of their grants on training.

Little money is currently appropriated at the state level in Connecticut for teacher training. Most, if not all, training is being done through local school budgets supported by local tax dollars.

"The use of the Internet as a tool has really skyrocketed, so you should constantly be doing training, and you constantly want to do more," said Jim Morrow, computer and technology operations coordinator in the Somers public schools. Many towns are trying.

Joseph Castagnola, Portland's superintendent of schools, said the training is the main priority in Somers' technology plan.

"You don't want to buy \$1 million worth of equipment and not train the staff on how to use it," he said.

LeRoy Hay, assistant superintendent of schools in Wallingford, said teachers have cited training as their top priority because the four days they have a year for all types of training is not enough.

"Wallingford was way behind the state average in embracing technology," said Hay, who was named national teacher of the year in 1983. "I'm not sure there was a perception of just how rapidly information technology was to become pervasive in our society."

Jacqueline, the Windsor High English teacher, said she considers herself one of the lucky ones.

She is the only teacher in her department with a classroom computer with Internet access. It was donated four years ago by Westfarms mall.

And Jacqueline said she is lucky to work for a school system that, although modest in its appropriation for technology, has been aggressive in providing training for teachers.

Windsor offers educators computer classes on professional development days, during school vacations and on Saturday mornings. There are also three-day summer workshops and software materials that teachers can take home. Windsor also hired a full-time technology support consultant last year to provide hands-on computer training sessions.

In Clinton, teachers are offered a drop-in computer course after school each week, said Therese Fishman, assistant superintendent of schools. It is taught by a teacher who helps other educators develop their own classroom computer projects.

A handful of other schools have adopted a different approach to encourage computer proficiency. At least seven districts — Rocky Hill, East Hartford, East Haven, Region 14, Wethersfield, New Fairfield and Newington — now let teachers and

administrators buy computers through payroll deductions, often charging little or no interest.

"Training needs and support are decreased, and the confidence level of staff goes up," said Nicholas D. Caruso, spokesman for the Connecticut Association of Boards of Education. Local education officials are also beginning to take advantage of services at the state's Regional Education Service Centers. The centers, such as the Capitol Region Education Council in Hartford, provide a variety of training options at a reasonable cost to school districts.

School systems have begun considering an applicant's knowledge of computers when hiring new teachers.

"We're asking what is it we expect a new person coming into the system to have in their repertoire before we consider them for hiring," said Morrow, Somers' computer coordinator.

On July 1, 1998, all candidates for teacher certification in the state will be required to have completed a computer and information technology component during their course of study.

This revision resulted from the work of the Joint Committee on Educational Technology, a 6-year-old collaboration of education and computer experts that is helping state officials plan and use educational technology.

In addition, the joint committee successfully lobbied state officials in 1996 to require all school districts to provide some computer training to teachers in their regular professional development.

Caruso, a member of the committee, said the changes respond to the need for Connecticut teachers to be able to integrate computers in the classroom.

But the changes are slow in coming.

A few resourceful educators, such as Rocky Hill High School history teacher Richard Bruneau, aren't waiting for their schools to catch up.

They're getting computer training and equipment on their own. Bruneau received a \$30,000 grant from the state Department of Education's Goals 2000 program that bought his classroom a personal computer, monitor, software, two large televisions, a document scanner and a projector that transfers images from the computer onto a screen. He taught himself how to use the equipment.

He says teachers need to have computers on which to practice.

"Computers can be intimidating," he said. "Otherwise, teachers will just keep falling back on things they already know."

Bruneau's students now use the multimedia equipment to simulate historic battles and other events.

"History is fundamentally a story. If I can use computers to find a better way of telling the story, then I think it works," Bruneau said. "But any technology is really only as good as the course itself and the person who is teaching it."

Courant staff writers Theresa Sullivan Barger, Paul Marks, Don Stacom and David Owens and Courant correspondents JoAnn Goddard, Peter Marteka, Eric Weiss and Claudia Van Nes contributed to this story. ■

67. The Hartford Courant

May 18, 1997

Companies demand more than just the three Rs

By JESSE LEAVENWORTH This story ran in The Courant on May 18, 1997

On the manufacturing floor at Pratt & Whitney, a computer keyboard sits beside nearly every machine.

The aircraft engine maker in East Hartford is not hiring high school graduates now, but when it starts accepting applications, the competition will be fierce and anyone not comfortable with a computer should look elsewhere, company spokesman Mark Sullivan said.

"In our manufacturing area ... you cannot survive without basic computer skills," Sullivan said.

But Pratt, like other high tech manufacturers, wants more than technical know-how from its workers. They must know basic mathematics, and they must be able to read and write.

"We're not looking for future Mark Twains, but we are looking for people who can communicate," Sullivan said. "When we do start looking at high school graduates, without these skills, you're not going to be in the running."

This combination of technical and three Rs proficiency is in demand, according to a broad representation of

educators and labor and business leaders who endorsed a 1992 U.S. Dept. of Labor report. The Secretary's Commission on Achieving Necessary Skills (SCANS), which has been incorporated into the curriculums of some school systems in the state, said business people want educators to nurture well-rounded, technically adept students. A diploma without accompanying skills is worth less and less, the report said.

"The time when a high school diploma was a sure ticket to a job is within the memory of workers who have not yet retired," the report said, "yet in many places today, a high school diploma is little more than a certificate of attendance."

The SCANS report said effective workers know how to use resources, work well with others, use computers to process information, understand technological systems and can apply technology to specific tasks.

Writing a clear memo is a challenging task for some, and many businesses are focusing more on English proficiency.

Christopher Harrison, human resources manager for The Stanley Works, said he's

often discouraged by applicants' cover letters. Applicants who may have solid technical backgrounds frequently mar their cover letters — and their prospects — with typos and incorrect grammar, Harrison said.

"Overall, I'm not impressed with the writing skills I see," Harrison said. "Business writing is very important."

The majority of business writing, of course, is done on computers. A wide and expanding range of jobs incorporate computer technology, from architecture to car repair. And because many businesses employ sophisticated hardware, educators and students must have access to that hardware as well, the SCANS report said.

"If the goal of creating high-performance learning organizations is to be realized, the reinvention of American education has to incorporate these new tools," the report said.

Lauren Kaufman, vice president of the Connecticut Business and Industry Association, said many schools in the state are trying to ensure computer literacy, but "I think it's still a little uneven because it's a significant resource issue." ■

68. The Hartford Courant

May 18, 1997

Whiz kids in a whiz-bang world

By MATTHEW HAY BROWN This story ran in The Courant on May 18, 1997

Seth Horila is just 15, but around the E.O. Smith High School media center, teacher Peter Salesses considers him a colleague.

The sophomore has been helping Salesses maintain, upgrade and network computers. He diagnoses problems, shops for parts, and recommends purchases.

Seth's knowledge has been critical to the regional high school in Mansfield,

which doesn't employ a computer technician.

"You wouldn't expect that level of sophistication from a child his age," Salesses says. "He's proved to be a real benefit to the school."

But Seth, who has picked up most of

his knowledge on his own, shrugs at the notion.

"It's something different from doing schoolwork," he said. "They would have to pay someone else to do it, so I'm probably saving them some money."

As schools throughout the state plug in to new technology, a growing breed of computer whiz kids like Seth is taking a lead role in making it work.

On their own time, they work in sales, technical support and Web page design. At school, they're recommending purchases, installing hardware and software and even teaching their teachers about computers.

But most important, educators say, such students are introducing a new type of learning, in which they work cooperatively with teachers to solve problems. "They're on the cutting edge of something we're going to be seeing more of in the not-too-distant future," says James Ritchie, Plainville's superintendent of schools.

In the not-too-distant future at Simsbury High School, junior Jonathan Green will become a teacher.

Outside of school, the 16-year-old is a computer technician at IES Computer Warehouse in Simsbury, where he assembles and repairs equipment and trains customers in Windows 95.

Next year, he'll sit in on Ken Fastiggi's programming class to answer questions about the C and C++ computer languages, which he has studied at Tunxis Community-Technical College in Farmington.

"He's certainly giving me a bit of an education," says Fastiggi, the chairman of the high school's science department. "He has a wealth of information, and he has the people skills to go with it. He can communicate, he's affable — this is the whole package."

Josh Warchol, a Berlin High School senior, designs Web pages. His clients include Telepartner International, the Wallingford computer company for which he works; Halloran & Sage, a Hartford law firm; and Double J's Billiards and Cyber Cafe in Berlin.

He also has designed the school's Web page, is converting the school newspaper to desktop publishing, and gets yanked out of class to fix computers in other classrooms.

"When you've got one thing going at a time, it's nice," says Josh, 17, laughing. "When you get everyone pulling you in different directions, it's hard. You're not really obligated to them, but you can't withhold your super powers."

At Plainville High School, a cadre of computer-smart students has become a

community resource.

The 11 juniors and seniors, who call themselves the "Kitchen Cabinet," have prepared computer-generated budget presentations for the school board and the town council, designed electronic marquees for student performances and led technology workshops for teachers.

By day, they're on call to fix computers in the school. At night, they teach and help residents who come to the media center for free time on the computers.

Cabinet members count themselves lucky.

"Our experiences in the class probably give us more knowledge than other kids," says senior Bill Detlefsen, 17. "It's a real advantage — whatever career I choose, I'm sure there's going to be a lot of computer use."

"Just being a part of the class is a tremendous learning experience," agrees classmate Jen Korby, 17. "We're learning about the use of computers in today's world."

Ritchie, Plainville's superintendent, says the cabinet has spurred discussion about changing roles in education.

"What they are doing is forcing people to think differently about how we treat kids and how we educate them," he says. ■

69. Dallas Morning News

May 18, 1997

For term-paper mills, writing may be on wall Senate OKs bill to ensure student authorship

AUSTIN - Cliffs Notes would still be all right, but phony term papers sold for profit would be illegal for the first time in Texas under legislation passed Saturday by the Senate.

The measure by Sen. Teel Bivins, R-Amarillo, is intended to crack down on term paper factories that sell to college students who want to pay someone else to do their work.

"This is a real problem," Mr. Bivins said.

By not having a law on the books such as in 16 other states, "we are condoning the business of cheating in our colleges and universities," he said.

Sen. Steve Ogden, R-Bryan, said he has seen evidence of the problem at Texas A&M University.

"The kids are writing less and less because the credibility of what they are turning in has become more and more suspect," he said.

"The quality of education for many students in Texas has been lowered because professors ... are not sure who is writing the papers. So they say why bother with the exercise."

Under the bill, a company selling term papers or theses would be subject to a Class C misdemeanor, with a fine of up to \$500 for each offense. Students buying papers would not be affected.

When the measure passed the House, the crime was a Class B misdemeanor, which carries jail time and a fine.

Several senators objected to the stiffer punishment in the House bill and initially

blocked consideration of the proposal.

Mr. Bivins subsequently agreed to reduce the crime to a Class C misdemeanor, and the bill was brought up for debate. It passed on a voice vote and must return to the House for consideration of the Senate amendment.

Later, Mr. Bivins said the legislation still should deter term paper factories trying to sell their products in Texas.

"This will allow universities to notify people who are advertising the sale of papers that it is now a crime in Texas to sell term papers," he said. "And if we see there is a good deal of prosecution, we may consider raising the penalty in the future."

Sen. Mike Moncrief, D-Fort Worth, questioned how the law will be enforced.

Cable Companies Outline Plans for Hooking Schools to Internet

WASHINGTON (AP) - Cable television executives announced plans today to offer elementary and secondary schools in the United States free, high-speed equipment to link to the Internet.

Over the next year, 15 cable companies pledged to provide 3,000 schools in 60 communities with the Internet connections. It is part of a new industry-wide program that aims to eventually hook up all elementary and secondary schools in the United States.

National Cable Television Association president Decker Anstrom, in an interview, said the goal is to wire as many of the nation's 95,000 private and public elementary and secondary schools as possible. "But what happens after year one? I don't know," he said. "A lot depends commercially on how successful service will be."

Under the program, participating companies will install a cable modem into at least one site in a school. The modem is a new but still developing device that allows people to connect their computers to the Internet and other computer networks via coaxial cable at speeds considerably faster than standard modem over existing telephone lines.

Some cable companies, expanding beyond their core business, want to offer high-speed data links to their cable customers. Others are experimenting with the cable modems. But there are technical and financial hurdles that still need to be resolved and analysts have mixed reviews about the business' prospects.

Cable giants Tele-Communications Inc., Time Warner Inc., and Continental Cablevision are among the companies experimenting with the technology and are among those that plan to provide cable modems to schools in their service areas.

More...

Cable TV Firms to Link Schools to the Internet

Industry Is Latest to Make Such a Pledge

By Paul Farhi
and Elizabeth Corcoran
Washington Post Staff Writers

The cable television industry plans to offer almost all elementary and secondary schools in the United States free, high-speed equipment for linking to the Internet, joining a race started by other industries to wire schools to the global computer network.

Cable companies, including industry leaders Tele-Communications Inc. and Time Warner Inc., will offer every interested school in their service areas the electronic gear that they are beginning to introduce in selected communities, industry officials said. The equipment will be so-called cable modems, which provide much faster connections to the Internet than conventional modems that rely on telephone wires.

The industry plans to announce the program at a Washington news conference today, industry officials said. They have not yet announced

which schools would be offered the technology first.

Schools that already link to the Internet generally say they are pleased with what students are doing on-line. Some students learn about other countries by tapping into sites about such places as Mongolia and Argentina. Others who are studying Congress electronically fetch copies of some of the latest bills. The Clinton administration has said it hopes that all schoolchildren—regardless of income or location—will be able to use the Internet by the year 2000.

Cable companies aren't the only ones gearing up to wire schools. Industry observers say that today's announcement is a sign of growing competition among telephone companies, Internet specialty firms and cable operators to provide access to the Internet. For instance, last October, AT&T Corp. pledged to spend \$150 million over five years to help connect schools to the network.

The competition may represent a loss-leader strategy for Internet providers. While neither cable nor phone companies are likely to make much money by piping the Internet into schools, they hope that teachers and students will use the same company to reach the Internet at home, a potentially vast market, analysts suggest.

The cable industry is a latecomer to the business of offering connections to the Internet and its graphics-rich portion, the World Wide Web. Cable modems, which use a cable system's network of copper and fiber optics, move data at breathtakingly fast rates, meaning that users don't have to wait for complex graphics to appear on their screens, as they do when conventional modems are used.

However, only a few schools could count on getting the new capabilities right away. Cable operators are just beginning to make the capital investments needed to upgrade their networks to transmit data to and from customers.

Cable executives suggest that wiring schools may cost their industry hundreds of millions of dollars. Even so, laying the path from a school to the Internet only brings the school partway there, and cable companies do not appear to be willing to pay for the rest.

For instance, a typical school would likely need a computer that will serve as the gate between the Internet and the students. Inside the school itself, classrooms must be connected via networks. Teachers must be trained to use the technology. And someone must be willing to pay the monthly Internet fees.

A grass-roots effort, originally the brainchild of John Gage, chief scientist at computer maker Sun Microsystems Inc., aims to wire the inside of schools. "NetDay," which is scheduled to take place during October, will rely on the labor of volunteer engineers and other technical people living near schools.

Wiring the schools, Gage said, "is the most difficult part. Once the wire is there, you've created a community of people dedicated to working [with] the schools," and helping them find the other resources they need.

"This is where we race the phone companies against the cable guys," and others, all in hopes of providing schools with low-cost, speedy Internet connections, Gage added.

The Net as a Tool for the Schools

Teachers must be technologically savvy for the students' sake

The cable television industry is offering free Internet access to elementary and secondary schools around the nation. In California, the first jurisdictions to benefit are Culver City, Claremont, Mission Viejo and other Orange County districts, Poway, San Diego, Chula Vista, Fremont and Sunnyvale. But how can schools ensure that such efforts aren't reduced to just another "boutique" project to show off on parent-teachers night? How can these changes best help students? And how do we ensure that teachers are prepared to use new forms of education technology?

To date, instruction in the schools has been textbook-driven, and for good reason. Authorized texts provide a clear and detailed path that even the weakest classroom teachers can follow without much risk. But that path is blurred as the nation's schools employ more computer-related lessons.

It is plain that teachers need time and instruction on how to exploit emerging technologies. Otherwise, a disjointed, trial-and-error process might ensue that slows rather than enhances instruction.

In the coming days, the National Foundation

for the Improvement of Education will release the results of a national teacher survey. It is expected to draw a strong connection between continuing professional development and student progress. New technologies are an important part of that development.

One instance of technological gain in L.A. County involves the Los Angeles Annenberg Metropolitan Project. After a slow start, LAAMP is beginning to benefit 100,000 students through challenge grants. The L.A. Unified School District will use part of its share of \$3.5 million in funding to make computer technology more widely available.

But to make the best use of that and similar money, the county clearly needs programs such as its year-old Technology for Learning initiative. Through it, according to the county Office of Education, partnerships with private companies, foundations and school districts have taught 2,400 county teachers in the past year how to use advanced technology to help their students.

Internet access is much more meaningful when the teacher knows exactly how to exploit the connection.

Technology

83. The Star-Ledger Newark, NJ

05/12/97; Edition: STATE; Section: EDITORIAL; Page 098

technology

Blame school funding problem on property tax mess

By Wilfredo Caraballo

The use of property taxes to fund public education is widespread in the United States. However, New Jersey has the dubious distinction of being the most property tax-dependent state in the nation when it comes to funding public schools. New Hampshire has a higher rate of property taxation, but residents of that state are not required to pay either an income or a sales tax.

Increasing education funding without addressing statewide equity issues has decreased efficiency and hampered efforts to reach parity among New Jersey's 611 school districts. This fundamentally flawed system hurts taxpayers and schoolchildren alike.

New Jersey's lopsided reliance on property taxes was the primary reason the state Supreme Court ordered changes in the school funding system more than 25 years ago. A continued reliance on property taxes has sustained and, in almost every instance, heightened the disparities among New Jersey's school

districts.

A new school aid law was signed by Gov. Christie Whitman in December and will take effect in the 1997-98 school year. The law, which is supposed to address expenditure disparities, will have the opposite effect. It will exacerbate the inherent inequity of using property taxes to fund education.

The new education funding plan is supposed to pour an additional \$286 million in state money into public schools. That's good, but property taxpayers will ante up more of the education bill than at any point in recent memory approximately 60 percent in the coming fiscal year. This means the state will once again be leaning on local property tax payers to raise the necessary revenues to run local schools.

It's time that this vicious cycle of flawed school funding schemes and corresponding court rejections came to an end. True school funding reform is long overdue.

Other revenue sources that are fairer

and less punishing to New Jersey families must be explored. In Michigan, voters approved a referendum that abolished property taxes as a means of paying for education. Another alternative is to limit the local property tax to a uniform rate below the statewide median. This approach would provide much-needed relief to overburdened residents while starting the process of reducing our reliance on property taxes to fund education.

New Jersey's education funding problems remain unsolved and will never be solved until we address the property tax issue. The reliance on property taxes is greater than ever, and the state Supreme Court order will not be met. This is the same old game with a different name. Unless a balanced, responsible approach to property tax reform is developed, New Jersey's children will pay the price in lost educational opportunities today and higher taxes tomorrow. ■

84. Los Angeles Times

* 05/14/97; Edition: Home Edition; Section: Metro; Editorial Writers Desk; Page B-8

Caution in Computer Funding: Washington should consider tying strings to money for schools

With the FCC's recent decision to create a special fund to link schools to the Internet and the Clinton administration's bid to double the Department of Education's funding for computer literacy, Washington is poised to send record numbers of computers into the nation's classrooms.

This is mostly welcome news. Introduced in school districts after careful planning, computers can help level the educational playing field, making complex concepts accessible to students with various backgrounds and learning abilities. Used improperly, however, computers can become little more than very expensive baby sitters, providing students little educational benefit and potentially stripping districts of scarce resources. Studies show, for instance, that some programs hawked as

"educational software" impart no more learning than a common video arcade game.

Because of the potential for misuse, Washington should consider attaching strings to the computer dollars it is handing out. One good vehicle for doing so is HR 1572, a bill introduced recently by Rep. Constance A. Morella (R-Md.). It would require school districts receiving federal funding under the Schools Act of 1994 to train and assess teachers for computer literacy.

The most important step, however, is for school districts to take the initiative in designing innovative programs and then funding them through competitive grants offered by agencies like the National Science Foundation.

A role model could be the Monterey Peninsula Unified School District, where

teachers and scientists are now creating a World Wide Web site called "Virtual Canyon." Using computerized video footage of a huge undersea canyon in Monterey Bay, students explore habitats and aquatic life and publish their results on the Web. Thus, in addition to learning about biology and marine ecology, students are able to develop marketable expertise in using computers as tools for communication and research.

But implementing this sort of technological learning nationally won't be cheap. An extensive study completed in 1995 by McKinsey and Co. says costs would run about \$109 billion to train teachers and install multimedia computers in all of our public school classrooms. That's some price tag, but one potentially worth every penny in the long run. ■

85. Houston Chronicle

May 14, 1997

THE BELL'S RINGING

Legislature needs to help fastest growing school districts

No matter what the fate of the House and Senate tax bills now before a conference committee, the Legislature must adjust the way it allocates state funds to local school districts or risk seeing the fastest growing districts buckle under the strain.

There are more than 1,000 school districts in Texas, but the 120 fastest growing districts — including Houston, Conroe, Fort Bend, Galena Park, Cypress-Fairbanks, Katy and others throughout the Houston area — have almost half of all enrollment in Texas. They must cope with 75 percent of the exploding growth in enrollment and

service 95 percent of the school bond debt issued in the last five years to build new campuses.

Under the current formula, the state enriches per-pupil payments to poor districts and to mid-sized districts to make up for disadvantages of size and tax base. The Legislature needs to enrich payments to the fastest growing districts to help cover the costs of rapid expansion — more district staff, construction management, acquiring and holding land in areas where land prices are rising, etc.

The current formula also actively penalizes many fast-growth districts. In order to build one new school after the

other, fast-growth districts must issue new bonds and then increase tax rates to pay for them. But the state reduces state aid to districts that raise tax rates beyond a certain point.

Texas cannot afford a system that handicaps the 120 districts that must educate half of all Texas children enrolled in public schools. The Legislature should amend the allocation formula to help fast-growth districts build the neighborhood schools they need and handle the debt service without having to raise local taxes through the roof. ■

86. Associated Press

05-14 3:29a

Governor urges new money for individualized student testing

By CONSTANCE SOMMER
Associated Press Writer

LOS ANGELES (AP) - In his latest proposal to boost California schools, Gov. Pete Wilson proposed uniform testing of elementary and high school students to measure individual skill levels.

Wilson said Tuesday that he will ask the Legislature to spend \$60 million to buy an "off-the-shelf, standardized test" selected by the state Board of Education.

But some contend that the governor's proposal would undermine efforts to create the state's own testing program.

"You need some connection between the curriculum and a test," said Tommye Hutton, a spokeswoman for the California Teachers Association. "If you pull something off a shelf, you have no guarantee this is happening."

Under Wilson's plan, all public school students in the second through 11th grades would take the test, and their individual scores would be available to their parents and teachers, Wilson said.

In addition, aggregate scores of a school district, a particular campus, or

even a classroom would be released to the general public, administration officials said.

"We need new standards to help bring the kind of accountability that our schools have long been lacking," Wilson said during a news conference at Camellia Avenue Elementary School in North Hollywood. "We need to be able to measure each student's individual skill levels."

The test would cost about \$10 per student in the second-through-eighth grades, and \$40 each for the older students.

In January, the governor proposed budgeting about \$23 million, or \$5 per pupil, for all public schools that wanted to administer school-wide, standardized tests. His latest proposal would add some \$60 million and would make the testing mandatory.

Wilson said additional funding for the testing and other school-related programs is being made possible by a dramatic increase in revenues as the state recovers from economic recession.

Aides to the governor said the test

could potentially allow parents and administrators to judge specific teachers, by allowing them to compare one classroom's scores against another.

"The test for us is a measure of accountability," said Dan Edwards, the assistant secretary of the Office of Child Development and Education.

Wilson also called for an additional \$50 million for his so-called "digital high school," a four-year plan to equip California high schools with high-tech gear such as computers. He earlier proposed \$50 million; his latest announcement brings the total package to \$100 million.

But Hutto balked at weighing teachers' performances in a such a manner.

"We don't think that's a fair way to judge a teacher's capability," she said, citing the involvement of parents, the time a child spends watching television, and other factors as influencing the performance of various classrooms.

The Legislature's fiscal adviser has estimated that the state has about \$2 billion more in revenues than it expected

service administrators and scores such tests as the Graduate Record Examinations.

Both the New York City-based College Board, which sponsors the SAT and PSAT, and the testing service have consistently denied charges that their tests discriminate against girls. However, girls' SAT math scores last year lagged 34 points behind boys', on average, on the 200-to-800-point scale. Boys scored 4 points higher than girls on the verbal section. ("SAT, ACT Scores Up, But Racial Gaps Remain," Sept. 4, 1996.)

Critics argue that girls lose out when admissions to college and scholarship awards are based on such scores. And, they contend, because girls tend to get better grades than boys in high school and college, the SAT fails at its stated goal of accurately predicting college performance.

In the study, the ETS acknowledges that shortcoming but argues that grades and tests measure different types of skills and should be used together to make judgments about students.

"It's laudable that ETS researches its own tests," said Marcia C. Linn, a professor of education at the University of California, Berkeley. "Still, my question is, can they design a test that doesn't underpredict [women's college grades], and what would that test look like?"

One detractor blasted the study. "It's a smoke screen designed to divert attention

from the ongoing problems with the exams that they publish," said Bob Schaeffer, the public education director at the National Center for Fair & Open Testing, or FairTest, a Cambridge, Mass.-based watchdog group. "What does it prove for a big company to publish a research paper that says its product is not flawed?" Mr. Schaeffer said.

'Trying To Learn'

But Nancy S. Cole, the president of the ETS and one of the study's authors, said that the study aims to shed light on conflicting claims about large and small gender differences in student performance and to help the testing service improve its tests.

"Our motivation for doing research is to find out where we need to change so we can change," Ms. Cole said in an interview.

"We're not absolving ourselves," she said. "We're just saying that the notion that people have that there are some differences that must be bias just didn't hold up in the study."

In its review of existing studies, the report does its best to refute some of the allegations leveled against ETS tests and repeatedly knocks down claims of bias.

One finding, which the testing center acknowledges is not new, has particular significance for how students do on the SAT, and the study's conclusions about fairness rely heavily on it.

The study found that results from tests given to nationally representative samples of 12th graders reveal a bell-shaped distribution of scores for both genders, but with more males appearing at both the very lowest end and at the very highest.

As a result, when self-selected groups of high-achieving students take such tests as the SAT, the new report argues, the score distribution reflects only the male-dominated upper end of the spectrum of test-takers.

In addition, the report says, the skills tested on high-stakes tests such as the SAT may be those in which males perform better, such as mathematical reasoning and concepts, and the skills on which females excel, such as writing, "have either been overlooked or have been difficult and expensive to measure."

Such results, the study points out, "are not surprising or an indication of bias but are expected and follow from the results in representative samples."

Yet, the ets agreed last year to the settlement of a federal civil rights complaint by FairTest alleging discrimination against girls in the awarding of National Merit scholarships, which are based on PSAT scores. Under the agreement, the ETS promised to add a writing-skills test to the PSAT. ("PSAT To Add Writing Test To Settle Bias Case," Oct. 9, 1996.)■

15. Education Week

May 13, 1997

FCC Approves Discount Plan for Schools

By Andrew Trotter
Washington

The Federal Communications Commission voted unanimously last week to give deep discounts on the purchase of telecommunications services to most schools and public libraries, lowering a major hurdle between schools and the information age.

"This is one of the top five education actions by the federal government in our nation's history," said Gordon M. Ambach, the executive director of the Council of Chief State School Officers, in a reaction that typified the enthusiasm for the move expressed by many education groups.

The cost break for educational

institutions, known as the "E-rate," will be available beginning Jan. 1 and could save schools and libraries up to \$9 billion over four years.

The FCC order, which implements the "universal service" provision of the Telecommunications Act of 1996, also guarantees that people in low-income and high-cost areas will continue to have affordable phone service.

Just before the vote, Reed E. Hundt, the commission's chairman, said the discounts were needed to provide opportunity and equality for all Americans and to further advance the nation's growing information-based economy.

The new rule sticks closely to the

recommendations issued last November by the Federal-State Joint Board on Universal Service, an FCC advisory group.

Schools in places with high telecommunications costs or high poverty rates will receive the greatest discounts—as much as 90 percent.

But all public, private, and parochial schools—as long as they are nonprofit and do not have endowments of more than \$50 million—will benefit.

The wealthiest schools will get discounts of 20 percent. Federal officials estimate that the typical school will receive a 60 percent discount.

The discounts cover all telecommunications services, including

telephone calls, wireless services, Internet access, and the installation and ongoing costs of internal connections within a building. Computers, software, and training are not covered.

Universal-Service Fund

The companies that provide the eligible services will be compensated from a universal-service fund created by fees paid by all telecommunications providers.

The fees will be assessed only as schools and libraries require the services.

Internet-service providers do not have to pay into the fund, a fact that has dismayed the telephone companies.

The fund has a cap of \$2.25 billion for schools and libraries for every calendar year.

But up to half of any unused amount will be carried over to increase the cap for the following year.

For the first six months of 1998, the fund is capped at \$1 billion.

Schools must apply to the fund administrator for discounts for specific services.

Then schools will pay the discounted rate, and the service provider will be reimbursed from the fund.

Any company, from a telephone giant to a small-town electrician, will be eligible to provide Internet access and internal connections within schools and libraries and be reimbursed from the fund.

Related Rules

The federal agency also gave

unanimous approval last week to two related regulations that make far-reaching changes in the rate structure for telecommunications services.

The rate changes are designed, among other purposes, to provide the wherewithal for phone companies to pay into the universal-service fund without raising charges for basic phone service.

The complex rules reduce the access fees that long-distance telephone companies pay to local phone companies to connect telephone calls.

They also permit local companies to make limited increases in phone charges for additional residential phone lines and multiple business-phone lines.

At a press conference after the FCC's decision, jubilant leaders of education and library groups and their supporters in Congress and the Clinton administration hailed it as a historic social policy. Several said it was on a par with the GI Bill, the law that since the 1940s has given education aid to veterans.

An Electric Moment

Vice President Al Gore, one of the first national leaders to champion schools' access to advanced telecommunications, compared the decision to the introduction of electricity in schools in the 19th century.

But educators have also cautioned that some schools will have trouble paying for telecommunications services even at the maximum discount.

Costly investments in computers, software, and teacher training also will

be needed to use technology effectively.

Secretary of Education Richard W. Riley relished the moment, then emphasized the task yet to come.

"We have a great responsibility," he said. "Most of all, we must show that it really makes a difference in the classroom."

Additional concerns about the decision were voiced by companies that provide local telephone service.

Marvin Bailey, the director of federal relations and educational policy for the Chicago-based Ameritech Corp., said he supported discounts for schools, but he questioned the "recovery mechanism" for the universal-service fund.

Mr. Bailey said the regional Bell telephone companies oppose giving schools discounts for internal connections and Internet access because they believe those are outside the scope of the Telecommunications Act.

The regional Bell companies estimate that those services will make up about 60 percent of overall spending from the universal-service fund.

If school discounts for internal connections and Internet access were excluded, the fund would require only \$1 billion annually from the various telecommunications providers, Mr. Bailey said.

If the companies decide to sue to block the rules, a court could put the E-rate on hold pending the outcome of such a suit. ■

16. Education Daily

May 13, 1997

JUDGE: PRINCIPAL MUST TAKE ACTION AGAINST HARASSERS

When a student complains about sexual harassment by peers, a school administrator must do more than separate the kids, a federal judge has ruled.

A junior high school principal who moved a girl who complained, and suspended the boys who were accused, may not have done enough to stop the alleged abuse, the U.S. District Court for the Northern District of California said in refusing to dismiss a case last month.

Changing the victim's schedule, the

court said, "was not a step reasonably calculated to end the peer sexual harassment."

Take 'Affirmative Action'

"Putting a stop to sexual harassment would seem to require taking some affirmative action against the harassers, and at the very least, speaking with them," the court said.

At this stage, the court must consider the facts in the alleged victim's favor. In refusing to dismiss the case, the court found the principal could be held

individually liable for violating Title IX of the 1972 Education Amendments, which prohibits sex discrimination in federally funded education programs. Another Brick In The Wall The ruling in *Nicole M. v. Martinez Unified School District* (1997 WL 193919) came down on the side of federal judges in California and elsewhere who are imposing greater responsibility on schools to stop students from sexually harassing classmates (ED, Jan. 2).

District Judge Marilyn Patel said

NATIONAL

1. USA Today

May 8, 1997

Schools, libraries to pay less for telecommunications

By Tamara Henry
USA TODAY

WASHINGTON - The Federal Communications Commission Wednesday agreed to give a cut rate to the nation's 110,000 public schools for Internet access and other telecommunications services.

Beginning Jan. 1, 1998, FCC Chairman Reed E. Hundt says discounts will range from 20% to 90%, providing yearly overall savings of \$2.25 billion.

Vice President Al Gore says the discounts - nicknamed the "E-rate" - mean that for "most schools and libraries the cost of both telephone access and Internet access will be cut in half. Access for our poorer schools will be virtually free."

The discount will be based on the

number of public school students eligible for free and reduced lunches, and it also will be available to about 9,000 libraries and those private, nonprofit schools with endowments of less than \$50 million.

Some school districts are paying about \$200 a month in access charges, while others pay \$2,000 for the same technology services. Currently telephone companies charge schools the business rates, which are higher than residential rates for phone service and online access. A few schools negotiate their own rates.

Anne L. Bryant of the National School Boards Association says only 14% of classrooms now have Internet access. Paul Houston of the American Association of School Administrators estimates the discounts will average about 60%.

To pay for the discount, the FCC approved a proposal to expand the scope of an existing fund that provides below-cost telephone service to poor and rural areas. That fund now is financed through charges to local and long-distance telephone companies.

Now, the fund will receive contributions from all telecommunications carriers, including cable operators and cellular service providers. The amount of support annually is capped at \$2.25 billion.

"History will record this act as the most important federal initiative to advance education into the information age of the 21st century," says Gordon Ambach, executive director of the Council of Chief State School Officers. ■

2. Chicago Tribune

May 8, 1997

FCC PLAN GIVES SCHOOLS INTERNET DISCOUNTS

America's schoolchildren would get the chance to use the educational resources of the Internet under a plan adopted Wednesday by the Federal Communications Commission.

The plan would provide schools with discounts of up to 90 percent of the cost of bringing the Internet computer network into classrooms.

Virtually all 110,000 public and private elementary and secondary schools would be eligible for discounted rates, which Congress required in a 1996 telecommunications law.

Schools also would be given discounts

for the costs of hooking up to telecommunications networks needed to tap into the Internet and the costs of wiring inside classrooms.

Discounts would vary and would also be available to "disadvantaged" libraries, though the criteria for that are not clear. ■

3. Newsday

May 8, 1997

FCC: Give Schools Internet Discount

By Matthew McAllester. STAFF WRITER

President Bill Clinton's vision of bringing the Internet to every classroom in the country by the year 2000 moved closer to reality yesterday when the

independent Federal Communications Commission approved a plan that will give schools a 20 to 90 percent discount on Internet access.

"For any school that has or hasn't started to put themselves onto the information superhighway, this should prove a serious incentive to get on it or

increase the degree to which you make technology an integral part of every student's education," said Jamie Rubin, FCC education task force director.

Starting next year, the plan, which will involve \$2.25 billion per year at the most, will provide funds to any school that applies, including private schools. The money will be raised through fees from telecommunications companies and

will be distributed according to the relative wealth of the school district. Libraries also will benefit under the plan, which aims to fulfill the requirement of the 1996 Telecommunications Act to provide affordable, high quality telecommunications access to all Americans.

"It sounds like a wonderful thing for sure," said Robert Parry, deputy

superintendent of Nassau BOCES. "Local districts will determine whether the savings will be spent on other educational needs or in reducing taxes."

Rubin said schools and libraries should quickly begin to decide how much Internet access they want to invest in so that they can be ready to fill in the application forms in the fall. The program will begin in January, he said. ■

4. The Washington Post

05/08/97; Edition: FINAL; Section: Financial; Page E01

\$2 Billion in Discounts to Aid Schools' Access to Internet

By Rene Sanchez

Washington Post Staff Writer

It is a landmark subsidy for the nation's schools: more than \$2 billion a year in discounts to help educators plug their students into the computer age.

That pool of cash, which would be created under a plan adopted yesterday by the Federal Communications Commission, could provide a much-needed boost to school districts scrambling to connect their classrooms to the Internet but lacking the resources to do it.

Under the FCC plan, more than 110,000 schools nationwide, most of them public, will be eligible beginning next year for discount rates that range from 20 percent to 90 percent for connection to the Internet and service charges. The size of the discounts will depend largely on how economically disadvantaged a school's enrollment is. Some libraries also will be eligible for lower rates. In all, more than 50 million students could benefit.

Education Secretary Richard W. Riley hailed the discount plan yesterday as a "giant step" into the next century for the nation's schools. However, several studies recently have estimated the total costs of infusing classrooms with new technology to be much greater than the amount of the subsidy that the FCC has approved. By some measures, meeting that goal could cost \$109 billion over the

next decade.

Even with the new discounts, many state and local governments could struggle to come up with the money needed to fully enter the information age. Schools that received a 60 percent discount, for example, still would have to find enough money to foot the rest of the bill.

But education officials expressed optimism yesterday that the discounts will spur more states to increase their commitment to improving school technology.

"This will start the ball rolling," said Carolyn Breedlove, a policy official at the National Education Association, the nation's largest teacher union. "It's definitely going to be hard in some areas, but having this kind of foundation is a huge incentive."

The number of schools tapping into the educational resources on the Internet is rising sharply. More than half of the nation's public schools are now linked in some way to the Internet, up from 35 percent two years ago, according to Education Department surveys. Few individual classrooms, however, are wired — less than 15 percent, by some estimates. And affluent schools are much more likely than those in rural or poor urban areas to be online.

Linda Roberts, director of the Education's Department's technology

office, said that the full-priced monthly costs of using the Internet have deterred some schools from installing the technology in more than one classroom, if at all. A growing number of states are vowing to get all of their public schools linked to the Internet, she said, but only a few are getting close to achieving that goal.

This is how the discount plan will work: Schools can get lower rates for having the technology installed in classrooms, as well for connection charges to a computer network and for monthly service costs. Schools will not be handed money from the \$2.25 billion annual fund that the FCC is creating. Rather, they will pay the technology company from which they purchase services a portion of the bill, and the government will reimburse the company for the rest.

Discount rates will be determined by the number of students at a school who are eligible for federally subsidized school lunches. Schools with less than 1 percent participation in the subsidized lunch program would get a 20 percent discount, while the poorest school districts would get 90 percent discounts. Private schools must have endowments of less than \$50 million to be eligible. Federal officials estimate that the average discount rate for a school will be about 60 percent. ■

5. Los Angeles Times

* 05/08/97; Edition: Home Edition; Section: Business; Financial Desk; Page D-5

Winners and Losers in New Fee Rules

By JUBE SHIVER Jr.

The Federal Communications Commission on Wednesday issued wide-ranging rules that will change domestic phone charges. Here's who stands to benefit from and be hurt by the changes:

WINNERS

Long-distance companies: AT&T, MCI, Sprint and other long-distance firms now pay the bulk of subsidies to fund universal access but will contribute much less under the new rules because local carriers will be required to sharply reduce some of the costs they charge long-distance carriers for originating and terminating toll calls.

Local phone rivals: For the first time, companies that compete against the Baby Bells to offer local phone service will be able to share in the billions of dollars'

worth of subsidies that go to local carriers to pay for phone service in high-cost areas.

Schools and libraries: A universal-service fund will be created to help link the nation's schools, libraries and some rural hospitals to the Internet.

Poor and rural customers: A universal-service fund will continue to benefit these customers with subsidies. The FCC says added subsidies will start Jan. 1, 1999.

LOSERS

US West and GTE: Both companies serve a large number of subscribers in high-cost rural areas and are likely to feel the financial pinch of the FCC's cut of long-distance access fees, which largely underwrite rural phone subsidies.

Multi-line phone users: Businesses and residential customers will pay higher

rates for extra phone lines. Hardest hit will be small businesses that make few long-distance calls and lack a private branch exchange, or PBX, to route calls from a single incoming line to several internal extensions. Also, customers who use a second phone line at home to use the Internet will pay slightly higher monthly rates. But businesses and residents with high-speed ISDN lines for Internet access will pay as much as 75% less in basic monthly costs for the service.

Internet access providers: These businesses will be disproportionately hit because they maintain hundreds of phone lines through which their customers gain access to the Internet. However, they were exempted from paying additional special access fees to local phone carriers. ■

6. The Wall Street Journal

05/08/97 Section: Technology & Health;

FCC Takes On Phone-Company Subsidies

By Scott Ritter

Staff Reporter of The Wall Street Journal

WASHINGTON — The Federal Communications Commission took the first major steps toward revamping the \$23 billion web of telephone-company subsidies, but postponed a huge decision on continuing to subsidize consumers who live in high-cost areas.

The rules adopted yesterday will impose a \$2.75-a-line fee for business customers that have more than one phone line, an increase that will show up in bills come January.

The FCC, as part of the government's push to make telephone service more competitive, **adopted related plans to keep basic local-calling rates affordable and wire the nation's classrooms and libraries to the Internet.** But it delayed until 1999 a vote on how much should be spent to keep phone service affordable in rural areas and other parts of the country where stringing phone lines is expensive.

"We're now on a much slower path to subsidy reform than many people thought," said Scott Cleland, an analyst

with Washington Research Group, a division of Schwab Capital Markets & Trading Group. "The status quo survived to a large extent."

By rejiggering the complex system of access charges, which are the fees long-distance carriers pay local phone companies to connect calls, FCC officials said residential and business callers will see lower long-distance rates in coming years. That is partly because the FCC rules cut access charges by \$1.7 billion beginning in July, and AT&T Corp. and other long-distance carriers have promised to pass the savings on to customers. All told, access fees will drop by \$18.5 billion over the next five years, FCC economists said.

While the access charges will decline in the future, the FCC's plan shifts other fees to flat-rate monthly charges, including the \$2.75-a-line fee for businesses with multiple phone lines. That could hurt businesses that have a lot of phone lines but make few long-distance calls. The agency also adjusted the formula that determines the cap on prices local phone companies can

charge long-distance carriers that connect calls over their networks. Under the new formula, which is tied to productivity gains, prices will drop significantly.

Although the final details of the order weren't available, long-distance carriers were generally happy with the agency's orders. "The FCC has crafted a good compromise that will result in tangible benefits for American consumers," AT&T Chairman Robert Allen said. But he urged the agency to continue pushing for access-charge reductions.

But the commission's actions left some local phone companies rather grumpy. "I don't know of any company in America that will remain in business if required to reduce rates year after year by 6.5% more than the national productivity. Yet we're being ordered to do so," said Richard McCormick, chairman of U.S. West, in Denver. "And, we're being ordered to do so on top of being required to reduce prices in other areas and to open our networks at below costs to competitors who want to serve only our most profitable customers."

Edward Young, vice president for

external affairs at Bell Atlantic Corp., in Philadelphia, wasn't happy either. "We are disappointed that the FCC has gone beyond the requirements of the Telecom Act by mandating lower access charges rather than letting the market drive down prices," he said.

By 1998, access charges will drop to about a penny a minute from nearly three cents today, according to the FCC.

Residential consumers with just one line will see their long-distance bills decline 8% that year, to an average of \$20.65 a month from \$22.50.

Meantime, the agency said it will continue to work on economic models to forecast the amount of money needed to subsidize phone service in rural and highcost regions of the country. The FCC also faces opposition from some state

regulators who say the states should determine those subsidies.

The decision to delay work on the issue drew a sharp rebuke from Senate Commerce Committee Chairman John McCain (R., Ariz.), whose committee oversees the FCC. "I am concerned equally with what the FCC has done today and with what the FCC has failed to do today," he said. ■

7. St. Louis Post-Dispatch

May 8, 1997

Getting Connected

Discounts For Schools To Link With Internet Aimed At Financial Gap

By Harry Levins Of The Post-Dispatch Staff

Post-Dispatch News Services Contributed To This Story.

A federal agency took a big step Wednesday toward wiring classrooms for the Internet - and breaking down what some educators call "technological apartheid."

The Federal Communications Commission in Washington unanimously said "yes" to discounts that would cover up to 90 percent of the tab a school pays for hooking up to the Internet.

The Internet is the web of computer links that lets a computer user in Normandy, Mo., communicate with one in Normandy, France.

The Internet also opens up to its users millions of "sites" packed with information.

But this electronic library bears a price tag. Schools must buy:

- * New computers that can tap into the Internet; many schools are stuck with antiques from a decade ago.

- * Wiring to bring the Internet into the computers.

- * Service from Internet providers - the go-between companies that connect an individual computer to the Internet world.

By and large, the costs that come with the Internet mean that only wealthier school districts have been able to use it to the fullest. Thus, the "apartheid" of high-tech haves and have-nots.

Wednesday's vote will go a long way toward leveling things.

The discounts go to all schools, private as well as public. The poorest schools will get the most money - the 90 percent bargain.

But just last November, Vice

President Al Gore predicted that the average school would save 60 percent off list cost.

The money will come from a surcharge on families and businesses with more than one phone line. The flow begins on Jan. 1.

Nobody knows for sure how many schools already have the Internet.

A year ago, the Education Department put the figure at half of America's schools as of October 1995 - up from about a third the year before.

But even schools that are hooked up tend to cluster their Internet computers into a lab.

The 1995 figures found that only 9 percent of the schools had Internet connections in individual classrooms.

In the St. Louis area, educators welcomed the news from Washington.

At the school headquarters of the Archdiocese of St. Louis, curriculum director Ray Wicks was relieved to hear that the program would cover not only the Internet but also the wiring through which it flows.

"Typically, earlier discounts had taken the wiring up to the exterior wall, but the discount stopped there," he said.

"Now, it'll go through the wall and into the classroom."

As of last fall, he said, only one in five of the Archdiocese's 168 elementary schools could click on the Internet. And now?

"This is good news for all education, public and parochial."

It's good news for the Cahokia School District, which has barely tapped into the

Internet.

"We've received some grants in the last year for specific programs, but they're small," said administrator Arnett Harvey.

And how small is small? "We have maybe four terminals in the high school on the Internet, and maybe two in the junior high school."

In the Normandy School District, technical coordinator Cheryl Watts said she would give first priority to upgrading the Internet connection that her schools already have.

Only after that, she said, would she seek to put more computers in more schools.

Right now, the district's only pipelines to the Internet are 20 terminals in a lab at Normandy Middle School.

Watts described their wiring as midlevel. She wants better stuff, "so we can carry lots of voice and data at the same time."

Most home computer users pay about \$20 a month to an Internet provider.

The flow goes through phone lines; if the home has only a single line and the computer is hogging it, anybody trying to call in will get a busy signal.

Many home users get around the problem by getting the computer its own line. (In this area, that costs a bit less than \$15 a month.)

Schools can also pay in that low-end range for hooking up to the Internet. But many schools need (or at least want) wiring that can move more data with more zip.

And that kind of high-end hookup can

run \$3,000 to \$4,000 a month, said Cal Owens of the Cooperating School Districts of St. Louis County.

High- or low-end, the aim is to bring all children into the digital age.

Estimates are that four in 10 U.S. households have computers - magnets for youngsters. Children in these homes tend to become computer-literate in a hurry.

But those homes tend to cluster in the higher-rent districts.

Children whose parents have college degrees are good bets to tinker at home with a keyboard and computer mouse.

But children in poor families are shut out - unless they can get to a keyboard and a mouse at school.

Until Wednesday's announcement, the same imbalance extended to schools. The rich schools got the Internet, while the poor got poorer.

As one former big-city educator told *The Baltimore Sun*, "By the time you get down to it, you have to fund a school nurse or a computer. It's a decision no one wants to make."

Last year, in his State of the Union

address, President Bill Clinton laid out a goal: the Internet in every American school by the year 2000. The cost estimate then: \$50 billion.

Wednesday's announcement helps but will fall far short.

That's because the new telephone surcharge will generate only \$2.25 billion a year.

And the schools will have to share the Internet pie with libraries and rural hospitals, which can also cut themselves a slice. ■

8. The Atlanta Constitution

May 8, 1997

This story also appeared in the *Detroit Free Press*.

FCC approves plan to hook schools, libraries to Internet

By Jeannine Aversa, The Associated Press

America's schoolchildren would get the chance to use the educational resources of the Internet under a plan adopted Wednesday by the Federal Communications Commission.

The plan would provide schools with discounts of up to 90 percent of the cost of bringing the Internet computer network into classrooms.

Virtually all 110,000 elementary and secondary schools - both public and private - would be eligible for the discounted rates, which Congress required in a 1996 telecommunications law. Internet access is the centerpiece of President Clinton's second-term educational goals.

In addition to discounts for the Internet service itself, schools would be given discounts for the costs of hooking up to telecommunications networks necessary to tap into the Internet and the costs of wiring inside classrooms.

Discounts would vary and would also be available to "disadvantaged" libraries, though the criteria for that are not clear.

Vice President Al Gore said the FCC's action means that "our children will not be stranded in the high-rent districts of cyberspace."

But Sen. John McCain, R-Ariz., chairman of the Senate Commerce Committee, who voted against the 1996

law, called the Internet project a "huge new federal subsidy program."

The plan would limit the amount of money available to \$2.25 billion per year. The money would go to a school's telecommunications provider - possibly a local, long-distance or cable company - to pay for discounted services.

The money would come from raising a federal monthly charge for homes and businesses with more than one telephone line. It would also come from adding new contributors - notably wireless telecommunications companies - to an existing subsidy program that supports universal telephone access.

An independent third party, the National Exchange Carriers Association, - not the FCC - will collect and dole out funds beginning Jan. 1, 1998. However, schools and libraries can file applications for a slice of the funds beginning July 1.

Other than for the most affluent schools, discounts would range from 40 percent to 90 percent, depending on the wealth of a school and whether it is in a high-cost telecommunications area such as a rural community.

Wealth is defined by the number of students eligible for federally subsidized school lunches. Schools with less than 1 percent participation in the subsidized lunch program would get a 20 percent

discount.

Before schools or libraries are eligible for the discounted rates, however, state regulators must adopt the FCC's discounting criteria, an FCC attorney said. State regulators also would have to certify schools' technology plans.

The Clinton administration has said the average school discount would be 60 percent. One-third of schools would get at least an 80 percent discount and the poorest 15 percent would get a 90 percent discount.

About half the nation's public schools were linked to the Internet by October 1995, up from 35 percent one year earlier, according to an Education Department survey. However, only 9 percent of individual classrooms had access.

Lynne Bradley, deputy executive director of the American Library Association's Washington office, said 44.4 percent of all public libraries in the United States are connected to the Internet. But only about 28 percent have computers connected to the Internet available for public use.

The FCC also is making up to \$400 million available each year to pay for discounted telecommunications rates for rural health-care facilities. ■

9. The Washington Post

05/08/97; Edition: FINAL; Section: A Section; Page A25

This story also appeared in the Boston Globe, Philadelphia Inquirer and elsewhere.

THE FEDERAL PAGE

Education Bill For Disabled Clears Panels; Discipline Provisions Were Sticking Point

By Robert Greene
Associated Press

An overhaul of the law guaranteeing education for millions of disabled children cleared House and Senate committees yesterday after negotiators settled long-standing disputes over discipline, children's rights and legal costs.

The overhaul and extension of the 1975 Individuals With Disabilities Education Act could reach President Clinton's desk by month's end. Committee approval followed four months of negotiations involving the House, Senate and Clinton administration over a bill that had stymied lawmakers for more than two years.

A key compromise would give new powers to school officials to remove disabled students who bring weapons or drugs to school, and keep them out for as long as 45 days pending a final decision. The removal policy has been limited to students who bring firearms. Also, a hearing officer rather than a court would determine whether children can be moved to another classroom or school for endangering themselves or others.

However, the bill would guarantee that they could continue their education elsewhere if they were expelled.

"Educators will have a clearer understanding of when and how they may discipline disabled children," said Sen. James M. Jeffords (R-Vt.), chairman of the Senate Labor and Human Resources Committee. "Parents will know that the rights of their children are protected."

The original civil rights legislation guarantees a free and "appropriate" public education to children with a range of physical, mental and emotional disabilities. The law is intended to bring children with conditions into regular public schools as much as possible, requiring local schools to provide tutors, specially trained teachers, medicines and medical equipment.

However, costs have expanded with the increasing numbers of children found to have disabilities, including attention deficit disorder and learning problems such as dyslexia. The Education Department puts the number at 5.4 million and distributes money to states based on the number of disabled students.

One provision would change the funding formula to make federal support, about \$4 billion this year, depend on poverty and population. In other, related provisions, local schools could lower

their share of the program costs if Congress makes more money available, and states could not lower their payments to local school districts.

The bill also attempts to answer complaints by school officials about the high legal cost of resolving disputes over handling disabled children, while parents say too many decisions about the fate of their children are made without consultation. The bill would require that mediation be made available in all states as an alternative to more expensive court hearings and limit instances under which parents can collect lawyers' fees.

Parents would have to tell schools before attempting to move disabled children to special private schools and billing the public schools. At the same time, parents would have greater access to their children's records and deliberations over their future.

"The bill will assure parents' ability to participate in key decision-making meetings about their children's education and they will be updated no less regularly than the parents of nondisabled students through parent-teacher conferences and report cards," said Rep. William F. Goodling (R-Pa.), chairman of the House Education and the Workforce Committee. ■

10. Los Angeles Times

*05/08/97; Edition: Home Edition; Section: Metro Desk; Page A-3

Panels Appear to End Impasse on School Funds: Compromise may free special education money tied up by the state's refusal to provide same services to young felons

By FAYE FIORE
TIMES STAFF WRITER

WASHINGTON — Legislation approved Wednesday by two key congressional committees appears to have saved \$332 million in special

education funds for California's public schoolchildren—money that had been in jeopardy because the state has refused to provide the same educational services for imprisoned felons.

The U.S. Department of Education has

been threatening to withhold federal funds that help about 590,000 public school students with physical, emotional and learning disabilities. The federal officials cited a law that they interpret as requiring states to provide incarcerated

40. The New York Times

05/08/97; Edition: Late Edition - Final; Section: Section B; Metropolitan Desk; Page 9, Column 1

Metro News Briefs: NEW YORK

A School Board Gets Its First Black Majority

MOUNT VERNON — For the first time, the school board of this predominantly black city will be controlled by black members, five of whom won seats on Tuesday in the election for the nine-member board.

The black candidates defeated five white candidates who were supported by the Italian Civic Association. For more than 50 years, the association controlled the school board in Mount Vernon, a city where 54 percent of residents and 77 percent of public schoolchildren are black, as are the Mayor and four of five City Council members.

"This offers us a new possibility to

meet the needs of all of this city's children," said the Reverend W. Franklyn Richardson, founder of the Coalition for the Empowerment of People of African Ancestry, formed five years ago to oppose the I.C.A.

The coalition, which fielded the slate of five black candidates, maintained that the I.C.A.'s interest in school politics had everything to do with power and jobs and nothing to do with education. Many school employees are I.C.A. members, including Schools Superintendent William C. Prattella. Coalition officials have long called for the resignation of

Mr. Prattella, who, with 25 years on the job, is the longest-serving superintendent in Westchester County.

Asked about the election results, Mr. Prattella said, "I would prefer not to comment."

The last election, in 1996, resulted in a board of seven whites and two blacks. After that vote, in which four I.C.A. candidates defeated four coalition candidates, the coalition called for a Federal inquiry. Several state and Federal complaints of racism filed by the coalition are still under investigation.

04:34 EDT May 8, 1997■

41. Associated Press

05-08 0:25a

School district may lack money to operate new computers

GRAND JUNCTION, Colo. (AP) - The state is giving School District 51 nearly \$1 million to install computers in every elementary school library, but the district may lack the funds to operate the system.

The state grant will pay for the computers and the installation, but the district will be responsible for all access and communication charges. Instructional technology coordinator Nancy Robbins said it will cost \$53,000

to gain access to the state's electronic library system next year.

If the district installs high-capacity telephone lines to all 23 elementary schools, it could be billed another \$68,000 annually in phone charges, Robbins said.

The system is expected to be complete in two years.

School officials said the opportunity to install the computers outweighed the

future costs.

"It's kind of like the chicken and the egg here," Superintendent George Straface said Tuesday. "How do we keep up, make sure our kids have access to that technology?"

The school board president, Debbie Johns, said the district might be forced to limit use of the computers and downgrade the capacity of the phone lines to cut costs.■

42. Associated Press

05-08 1:07a

Board has hearing on health, physical education curriculum

By PEGGY FIKAC
Associated Press Writer

AUSTIN (AP) - The state curriculum rewrite shouldn't include sex education because Texas law leaves that issue to school districts, a conservative education activist says.

"It is clear that the Legislature intended for the highly sensitive subject

of human sexuality instruction not to be taught on the basis of a statewide mandate, but rather on the basis of local decisions reflecting local input and reflecting community values at the local level," Allan Parker of the Texas Justice Foundation said Wednesday. The group favors limited government and, among other issues, supports allowing parents to

use tax money for private school tuition.

But the general counsel for the Texas Education Agency, David Anderson, said at a public hearing that the state curriculum in that area is meant to serve as a guideline for schools that choose to teach sex education.

Education Commissioner Mike Moses has suggested that the section include

state law requirements that if sex education is taught, it must emphasize abstinence. Because textbooks are written to reflect the curriculum, that would ensure school districts have books available to them that follow the law, Anderson said.

The health and physical education curriculum rewrite, which includes sex education, had many supporters at Wednesday's hearing by the State Board of Education. Among them was Judy

Jonas of the Texas Comprehensive School Health Initiative, a coalition of health and education organizations.

"We really feel that they will give schools the framework they need to develop their own curriculum," she said of the rewrite, known as Texas Essential Knowledge and Skills.

The State Board of Education will take a preliminary vote this week on health and physical education, along with a proposed curriculum for foundation

subjects including English, science, social studies and math.

The state curriculum rewrite represents the first time in more than a decade that officials are taking a hard look at what students are expected to know.

The board earlier approved a revised curriculum for geometry, Algebra I and II and enrichment courses, including fine arts and career and technology courses. ■

43. Sacramento Bee

May 8, 1997

Schools gear up to trim the fat

By Jan Ferris Bee Staff Writer

Sacramento City school officials unveiled the blueprint Wednesday for a shake-up of the district's top management — a plan that would trim the long-criticized bloat at 520 Capitol Mall by reassigning a number of employees directly to the schools.

The proposed reshuffling aims to place more emphasis on a number of areas, including low-achieving schools, staff development and alternative education. Officials hope to reduce the administrative staff while increasing the number of educators coming in contact with teachers and students.

The reorganization also calls for the elimination of about 20 top jobs, although roughly as many new — and less expensive positions — would be created in their place, said Chief Financial Officer Laura Bruno.

Cutting top posts would save the district about \$200,000 a year. The savings would be offset, however, if trustees sign off on higher wages for other managers, also discussed Wednesday. The raises — which officials say would bring the Sacramento City Unified School District closer to Elk Grove, San Juan and other California districts — would cost more than \$250,000 a year.

Sacramento City officials have hinted

for weeks that they're angling to shuffle several inefficient managers to new positions. The issue is already shaping up as a concern to activists because many of the likely transfers are ethnic minorities. The sole speaker who broached the subject Wednesday was cut off by board President Jay Schenirer because the specifics about who may be reassigned won't be made public until Monday's board meeting.

"We believe this is a very diverse district," said Superintendent Jim Sweeney before the evening meeting. "We'll certainly be paying attention" to such concerns.

A restructuring of the long-ailing district, as well as the survey of management salaries, has been in the works since the new board majority was sworn in 4½ months ago. Then-Superintendent Ted Kimbrough was the first to go. His associate superintendent for personnel, Joseph Carrillo, was all but stripped of his duties in February.

Last month, Carrillo filed a claim against the district, a necessary legal step before he can sue. He is also seeking \$10,000 for an alleged Brown Act violation by the board in connection with his demotion.

Wednesday, however, officials tried to

train the focus on the goals of the larger reorganization, not the fate of individuals.

Adult education, magnet schools and several other student programs, for example, would be folded into the renamed "Instruction and Learning" division. The plan would also create "student achievement teams" assigned as "resource, coach and critical friend" to teachers and based in the district's most troubled schools. The campuses would be selected by this fall.

"I do think we'll be better as a result of this," Sweeney said.

Details of the reorganization were still being printed and passed out long after the meeting got under way. The most critical list, detailing the targets for elimination, wasn't released. That prompted a sharp rebuke from parent advocate Maureen Fitzgerald.

"This is the most major reorganization of this district in years, yet we are getting too little time to look at this," said Fitzgerald, who also criticized trustees for failing to videotape the meeting for cable broadcast.

Sweeney agreed to conduct a public question-and-answer session about the proposed changes from 11:30 a.m. to 1:30 p.m. Friday in the district office, 520 Capitol Mall. ■

"We feel the plan to reform higher education will be more responsive to individual citizens and Kentucky businesses," Read said.

John Antenucci, president of PlanGraphics, a Frankfort-based firm that has a global business in geographic information systems, said Kentucky's universities often are just not good enough.

"There is too much duplication. There is too much focus on head count. There is too little focus on university-level matters," Antenucci said. "This is unacceptable and it is costly."

Alex Warren, senior vice president for Toyota, said the company has a continuing opening for skill jobs that pay nearly \$50,000 per year because trained workers are not available in Kentucky.

Warren said the company went to the

traditional higher education system for training needs and failed. "Territorial politics determines the decision-making and everything stays the same," Warren said.

The company created its own system that depends on six institutions, some private and one from another state, to provide training.

But Mark Yelton, a Wilder businessman and president of the northern Kentucky UK alumni chapter, said the General Assembly needs to take into account what people want.

"I implore you, please don't take the attitude, 'You may not want it, but we know what's good for you,'" Yelton said.

Glasgow Mayor Charles Honeycutt, representing the Kentucky League of Cities, acknowledged that many city leaders where community colleges were

located fear the loss of those institutions. Honeycutt said the fears were unfounded and he endorsed Patton's plan.

"His plan offers a vision and a hope for tomorrow," Honeycutt said.

The opposite view came from Alan Taylor, a Henderson businessman who said he has used facilities at the local community college and hired its students.

"My fear is that we are debating fixing something that's not broken," Taylor said.

Elsewhere, a couple of other organizations weighed in on the debate on the side of Patton.

The Kentucky Education Association and the County Judge-Executive Association endorsed Patton's plan.

The Hazard-Perry County Chamber of Commerce endorsed UK's affiliation with the Hazard Community College. ■

59. Associated Press

05-08 7:30a

University of Iowa gets \$3 million research gift

IOWA CITY, Iowa (AP) - A \$3 million gift to the University of Iowa will allow researchers campus-wide to study viruses under one roof.

The donation came from Iowa alumna Helen Levitt, a longtime university supporter who died last November at the age of 86.

Part of the gift will pay for the construction of a laboratory in the new

Medical Education and Research Building. It also will provide support for the Department of Internal Medicine for a research program in the viral development of human diseases.

Virology is already the focus of part of the department of microbiology, but professor of internal medicine Stan Naides said other researchers are interested in viruses. He they would

benefit from a central laboratory.

Planning for the Levitt Viral Pathogenesis and Disease Research Laboratory will begin immediately, school officials said.

Levitt earned a degree in dramatic arts from the University of Iowa in 1932 and joined her father's business, the Levitt Investment Company and Postal Finance Company. ■

60. Associated Press

05-08 4:10a

Colorado receives \$1.8 million federal education grant

By The Associated Press

Colorado will receive a \$1.8 million federal grant as part of the Clinton administration's goal of providing each student with a computer and Internet access, the U.S. Education Department announced.

The money is intended to help schools

buy the hardware and software they need to give students Internet access and to pay for training teachers in computer science.

Wednesday's grants to Colorado and five other states were the first awarded under the Clinton administration's plan to

issue \$2 billion to all 50 states over the next five years.

Eric Feder, Colorado's director of educational telecommunications, said school districts and individual schools can apply for grant money through a competitive bidding process. ■

COMMENTARY

61. Tampa Tribune

May 7, 1997

Value of forced busing a matter for debate

By PETER E. HOWARD and JANIS D. FROELICH of The Tampa Tribune

The Racial Divide

Join the discussion as we bridge the racial divide

David Pierce spent his sophomore year at Gibbs Senior High School, an all-black school in south St. Petersburg.

A year later, in 1971, after the nation's highest court ordered busing to integrate schools, Pierce was sent to Boca Ciega High School in the predominantly white community of Gulfport.

He didn't want the change. He didn't welcome it. Eventually, he quit school because of it.

"All of a sudden we were told we had to go to white schools," said Pierce, who now lives with his son in Jordan Park, St. Petersburg's largest public housing complex on the city's south side.

He and his friends were told they would get better textbooks; that the equipment would be newer at the white schools. No one mentioned the racial tension that pulsed through the classrooms.

"A white kid spit in my face and called me the n-word," recalls Pierce, who is now 42. "So I hit him in the face."

Pierce was suspended after the fight. He quit school in his senior year and joined the Army.

Has forced busing for desegregation during the past 2 1/2 decades affected racial attitudes?

Absolutely.

Have the effects been positive?

Not always.

The court orders to integrate schools had only one intent: to offer equal education to all. Social change was never mentioned in the rulings. But it was always obvious that school integration would change racial attitudes one way or another.

To some, desegregation destroyed a "sense of community" in their neighborhoods. Many all-black schools were shuttered instead of integrated. Black children growing up in close-knit neighborhoods were scattered to outlying schools. Many were placed in at-risk or special education classes.

Gifted and magnet programs were placed in schools in minority neighborhoods to attract and boost the percentage of white students. For some, it seemed a ploy to reinforce a false sense of superiority in white children.

For many blacks, self-confidence and self-esteem were shattered.

While many black students endured forced busing throughout much of their educational careers, white students were told they would be bused for only two years.

"A major part of desegregation was to increase self-esteem," said Brenda Townsend of the University of South Florida's College of Education. "It has not promoted improved racial attitudes; it has not promoted improved self-esteem. It has taken children away from their neighborhood schools and made them pretty much outsiders."

"Especially when busing is forced, there is often resentment."

Others believe busing has been successful, if for no other reason than for exposing children to an integrated school society even though they live in segregation.

Charles Willie is a professor of education and urban studies at Harvard University's Graduate School of Education. He contends desegregation has helped children in a number of areas.

"There are things we learn when we are in the presence of our opposites," Willie said. "A racially segregated school is a deficient learning environment."

About 27,000 black and white students are bused in Hillsborough and Pinellas counties to meet desegregation standards set by a 1971 federal court order.

In Hillsborough County, the number of blacks in each school is not supposed to exceed 20 percent, although blacks remain a majority in about a dozen schools. This is due to shifting housing patterns and magnet schools, school spokesman Mark Hart said. In Pinellas, the black population is not to exceed 30 percent per school.

Hillsborough school officials want to be released from the 1971 court order, saying the district has accomplished the mandate of desegregation. But the NAACP Legal Defense Fund, which has championed desegregation since the 1950s, opposes the move.

If the federal court decides to release Hillsborough from court supervision, it could result in the end of forced busing for desegregation in the county.

This fall Hillsborough will open the first new high school in more than two decades built in a mostly black neighborhood.

The Howard W. Blake High School, at 1701 North Boulevard, will house a performing arts magnet program for 800 students from throughout the county, and a non-performing arts curriculum for an additional 1,000 students who live in surrounding neighborhoods.

Randolph Kinsey, president of the Howard W. Blake Alumni and Friends' Group, can remember his days as a teacher at the old Blake high school, which was closed after forced busing was imposed.

He remembers a school that had activities such as basketball and band that kept students occupied until 10 p.m.

As for racial attitudes, Kinsey said, "When you mix races on the same campus, it has to change racial attitudes because people begin to get to know each other."

"Unfortunately, the change hasn't been as much as we hoped. After a student is bused home, too often the new friendships that could exist after school don't."

Ken Perry, 47, equal opportunity and labor relations manager for the city of Tampa, was a teacher in Hillsborough beginning in 1971.

"I went through all the trepidation, the confusion, the troubles," he said of his role as a teacher during the initial stages of busing. "The mechanics of the plan were easy once boundaries were drawn. The hard part was dealing with students who were uncomfortable as they were placed in different situations. It

57. Associated Press

05-08 8:05a

Project to put 1,000 computers in New Mexico classroomsBy AROLENE LANGIE
Associated Press Writer

ALBUQUERQUE (AP) - Trying to improve New Mexico's technology skills, New Mexico private businesses are giving 1,000 computers to public school students and technological assistance to their teachers.

Technology Industries Association of New Mexico, an association of 27 large and small businesses, and nonprofit New Mexico Technet announced their joint effort to increase technology education Wednesday.

"For the first time, we have an industry that is taking a unified approach to putting technology in schools," said Technet marketing director Terry Boulanger. "We will provide not only the machines, but also volunteers to install networks and incorporate them into the schools' curriculums."

The donations are a result of companies finding a lack of students equipped to work in high-tech jobs.

"Our big companies would conduct interviews, and out of about 30 applicants, only three or four were skilled for high-tech professions," said TIA president John Jekowski.

Companies such as Intel Corp., Motorola Inc. and Phillips Semiconductors need up to 40,000 technicians in the next five years, industry observers have said.

One month ago, the computer chip industry found a shortage of qualified manufacturing technicians in the state and turned to vocational schools and community colleges to fill the jobs.

Officials in the computer chip industry are forecasting the need for 35 to 40 new factories in the next few years.

"What we hope with this new alliance is a significant opportunity for our educators and our schools in New Mexico to become part of the technological revolution of the 21st century," Jekowski said.

The 1,000 computers are primarily 486-level PCs, which are a generation old from current technology, Boulanger said. The computers are Internet capable and generally what are being used in schools in New Mexico today.

Now, Boulanger said, when schools approach companies such as Intel for donated equipment or education, the requests will go through the alliance, producing faster results.

"We won't have to recreate the wheel. We'll already have programs in place and things will happen much faster," he said.

Jekowski said the plan includes repairing donated equipment, helping schools develop their use of the machines and getting them on the Internet.

TIA is made of 27 companies, ranging from those with two employees to large companies such as Honeywell, Intel and Lockheed Martin. New Mexico Technet is a nonprofit corporation that provides economic development and education in New Mexico.

Over the past year, TIA has focused 90 percent of its attention on education for schools from kindergarten to vocational schools, Jekowski said.

"We found out there are thousands of programs just in Albuquerque schools alone supporting activities in technology. We said we don't want to do another program to that, but we are building an alliance in New Mexico to make us the number one in education in the market," Jekowski said.

The address for TIA's web page is <http://www.technet.nm.org/tia>. ■

58. Associated Press

05-08 7:54a

Public comments on higher education plan echo officialsBy MARK R. CHELLGREN
Associated Press Writer

FRANKFORT, Ky. (AP) - The opening day of public comment on Gov. Paul Patton's plan to overhaul higher education in Kentucky echoed the lines that have come from official sources since the debate began.

Those inside the current University of Kentucky system said Wednesday they were satisfied and argued, for the most part, for it to be left alone with only more taxpayer money added.

Employers, business people and many others outside the system said it was not up to the task needed and argued for overhaul.

"I've heard throughout this debate that it doesn't matter to have 'UK' on the diploma. I'm here to tell you that it does," said Kelly Howard, a nursing student at Henderson Community College.

"We don't hire workers by the name on their degree," said Earl Fischer, president of Western Kentucky Gas in Owensboro.

The lines have formed around the piece of Patton's plan that would separate the community college system from UK and place it in a new structure with the Kentucky TECH system of vocational schools.

"I'm convinced the present proposal will harm UK," said Gene Spragens, a

Lebanon banker and former president of the UK national alumni association.

The largest contingent among the 75 people signed up to speak the first day of public hearings by the interim Education Committee came from the Community College Faculty Alliance, a fledgling union group. Several members said any new system should have salary schedules and employee protections similar to those of state employees.

The strongest arguments for change came from employers.

Cindy Read, representing United Parcel Service, the state's largest employer, said UPS often has to look out of state for education and training.

according to Germantown police.

The incident marked at least the second time in less than three years that a rape has been reported in a Germantown high school.

In August 1994, a 13-year-old student at Houston High reported she was raped, and a 16-year-old boy was arrested in the case. Police could not recall any similar incidents at Germantown High, a school of about 2,700 students at 7653 Poplar Pike. Capt. Tom Lott, head of the Germantown Police detective division, said he could recall sexual battery cases, involving things like touching, but no

rapes like Wednesday's incident.

Lott declined to identify the suspect because he is a juvenile. He said both the suspect and the victim are freshmen.

The captain said he could not find any record that either Germantown police or Shelby County juvenile authorities had previously encountered the suspect.

Lott said the incident occurred about 10:30 a.m. in a restroom in the shop building on the east end of the campus.

The victim told police the assailant pulled her into the restroom and assaulted her. There was no indication

that there were any other students or teachers around at the time.

Lott said the suspect did not have a weapon. Police said they could not determine that the two students knew each other aside from being acquainted through school.

A student, who also was not identified, told police she was walking in the area and heard the screams coming from the restroom. She walked into the restroom and saw the victim struggling with the assailant, Lott said. The boy ran. ■

56. Associated Press

05-08 3:44a

\$1.8 billion school funding plan still has \$340 million revenue

By DENNIS CONRAD
Associated Press Writer

SPRINGFIELD, Ill. (AP) - Gov. Jim Edgar and legislative leaders are now ready to review and possibly flesh out the details of a \$1.8 billion school-funding proposal that is \$340 million short of identifying all its revenues.

The proposal was negotiated by aides to Edgar and lawmakers representing the four House and Senate leaders. The governor and legislative leaders, together with their working group, plan to review it late today.

It would provide \$1.2 billion in property tax relief and \$600 million in new money for schools. About \$1.5 billion would come from a 25 percent increase in the income tax rate. The source for the remaining \$340 million is unspecified.

Edgar said the proposal should be the centerpiece of future talks.

But legislative leaders within Republican Edgar's own party - Senate President James "Pate" Philip of Wood Dale and House Minority Leader Lee Daniels of Elmhurst - did not immediately embrace the model when it was unveiled Wednesday.

"I'd like to know where they are going to find it," Philip said of the \$340 million needed to close the funding gap.

Even if limited to a \$1.5 billion

income tax increase, the plan would be a hard sell.

"It would be the largest single increase in taxes in the history of Illinois," Philip said. "I don't think the majority of my caucus is for that."

Edgar aide Al Grosboll said the leaders would be presented with over 20 ideas on how to plug the \$340 million hole, including using existing state revenues.

"That is not an overwhelming number," he said.

House Majority Leader Barbara Flynn Currie, D-Chicago, a member of the working group, said Edgar was clearly putting his energy behind school reform.

"If that makes a difference to his legislative leaders in particular, then maybe something will come out of this," she said.

Sen. Vince Demuzio, an assistant Senate minority leader who participated in the negotiations, said the plan gives the leaders plenty of room for working out a final deal.

"I don't expect it to remain the same," the Carlinville Democrat said. "But if it stays within this framework, I think it is something I could support and ask my colleagues to do so as well."

The plan is intended to erase some of the spending inequities under Illinois' current school-funding system, where some school districts spend less than

\$3,000 per student annually and others contribute more than \$15,000.

Under the new plan, every school district would reach a widely accepted spending level of \$4,225 per student each year. That would help an estimated 700,000 Illinois students.

No district would get more than a 15 percent increase in state aid in the plan's first year even if it kept the district below the \$4,225 standard. The provision is intended to guard against wasteful spending.

"I'm just not quite sure that going to \$4,225 is enough to solve the problem," said Rep. Gary Hannig, D-Litchfield, an assistant House majority leader. "If we're going to do this thing, let's make sure that it does work."

The plan would raise the personal income tax rate to 3.75 percent from 3 percent, but the business income tax would not change. Also, businesses would get no property tax relief.

The plan also suggests a major school construction and renovation program but provides no specifics about how it would be funded.

The negotiators also provided various options to stiffen the requirements for teachers' certification and professional development, and other measures intended to make schools, teachers and students more accountable. ■

much there that I'm not getting here, like the arts."

A small percentage at Piney Woods actually pay the full \$8,000 a year tuition. Each student is required to work a minimum of 10 hours a week, taking jobs at the farm, president's office, on-campus dry cleaners and print shop or cafeteria. Beady estimates the cost of having each student on campus at

\$21,000 and says a small staff engages in intense year-round fund-raising.

Little funding comes from the government. The school's endowment generates \$3 million a year toward the annual \$6.8 million budget. A new fund-raising program, called "Circle of Churches," draws funding from a variety of churches willing to put the school in their budgets or to pay the tuition for

several students.

Beady says his immediate goal is still "Money. Money. We want to become better at what we do."

Nonetheless, Beady says, "Piney Woods is a God-touched place. It's been a special place for a long time," and he hopes to keep it that way.

By Tamara Henry, USA TODAY

11. The Financial Times

05/07/97; Edition: London Edition; Section: NEWS: UK; Page 8

Boarding schools seek new image

By Simon Targett
Education Correspondent

Britain's boarding schools are set for a radical face-lift with the revelation that they could soon be called "sleep-over" schools, according to the Boarding Schools Association.

The change is designed to give them a new "user-friendly" image and reverse their decline in popularity.

The country's 850 boarding schools, many established in medieval times, are "still handicapped by an outdated image", Mrs Ros McCarthy, chairman of the association, said yesterday.

In recent years they have been hit by changes in the way parents raise their children. They have also suffered from severe cuts in the armed forces. In 1988, 22,000 children enjoyed a Ministry of

Defence boarding school allowance. Today the figure is 10,000.

All this has led to a rapid decline in overall numbers since the mid-1980s — from 125,000 in 1985 to 90,000 in 1996 — and prompted boarding schools to rethink their recruitment strategy.

Many schools have been offering children more flexible boarding arrangements. Mrs McCarthy said that some schools give pupils the chance to "book one 'sleep-over' a week, rising to three or five as they get older and their enthusiasm grows".

Figures to be released next week by the Independent Schools Information Service suggest that the proportion of "occasional boarders" now constitutes "a significant element" of the school.

In several schools this type of

boarding is known informally as "flexi-boarding" or "opportunity boarding" or, in the case of those staying at school while their parents enjoy a night out at the end of the week, "Friday night boarding".

Also, in a bid to become more appealing, the boarding schools have invested in new facilities, which they do not think is reflected in the old label.

Mrs McCarthy said: "One small boy, looking at brochures of prep schools, asked his parents: 'Is this a hotel for children?'. For senior schools, with their single rooms, en suite showers, sports centres, tennis courts and swimming pools, 'boarding' is the wrong word. These are hotel facilities worthy of stars."

12. Associated Press

05-07 3:15a

High-tech learning coming - slowly - to rural schools

By The Associated Press

"Virtual classrooms" and two-way videoconferencing that come with them have long been anticipated in southern Indiana schools, with the expectation that school curricula would be widely expanded.

The concept is known as "distance learning" would allow them to more foreign language courses and advanced-placement classes, school administrators say.

Many envision something like a program at Indiana University Southeast, where students interact with a professor beamed from a studio in Bloomington or Indianapolis.

So far, however, no high schools in

the area employ distance learning.

"I've also been disappointed in how difficult it is to get the technology we need," said Linda Burnham, director of technology for South Harrison schools.

Many Indiana districts still see distance education as a way to expand course offerings in the face of tighter budgets. The course list has shrunk in rural high schools as they struggle to assemble faculties that can teach the math, science and other classes required for college-bound students.

At the same time, schools are under increasing pressure to better prepare students who plan to pursue technical training.

But buying two-way video and audio

equipment, plus telephone charges, is too expensive for most schools. Administrators estimate the cost at \$1,000 per month for each class.

And rural districts face other obstacles besides cost.

South Harrison administrators, for instance, want to add high school courses in French and advanced-placement calculus. But there is no cable TV service near the South Central High campus, and no fiber-optic line to carry the signals, Burnham said.

Indiana University Southeast opened its interactive studio last fall to link it to IU's eight-campus network. The studio is used extensively for education and nursing courses.

10. USA Today

May 7, 1997

Boarding schools are regaining their allure

PINEY WOODS, Miss. - Bahati Brown, 17, of Oklahoma City, had come to accept the strict rules at the Piney Woods Country Life School, even the prohibitions that seemed a throwback from the Victorian age.

There's a school uniform; boys are forbidden to wear earrings, trousers that expose their underwear and wild hair. And students can find themselves booted from campus for fighting or showing affection in public, including kissing or walking arm in arm.

But he supports his classmates who are in an uproar over plans by the administration to install surveillance cameras throughout the campus. To him, the school's efforts to protect and watch students have gone too far.

"We do everything that's right, legal and necessary to try and stay on top of things," says Piney Woods president Charles H. Beady Jr. "We drag them kicking and screaming toward excellence. We do what parents need to do for kids."

And to some, that's part of the appeal of Piney Woods, about 21 miles south of Jackson, the state capital.

But Piney Woods is now one of only about a half-dozen black boarding schools remaining in the nation for seventh- through 12th-grade students. It is considered the most viable and, tough discipline notwithstanding, has a long waiting list. Still, officials openly worry that such schools will one day become extinct.

At the turn of the century, officials estimate, about 100 such schools existed. In an era when black students were denied entry to white public schools, they provided not just a place where students could gain an education but a nurturing environment safe from racial strife.

Their numbers dwindled with the historic 1954 Brown vs. Board of Education decision striking down school segregation.

The schools enjoyed a growth spurt in the early 1990s as parents sought to protect their children from crime, violence and failing urban school systems. Three schools opened in the last five years.

However, in January, 86-year-old Southern Normal, once operated by the Reformed Church of America, closed its 400-acre campus in Brewton, Ala. Shortly thereafter, Ebon International Preparatory Academy in Forsyth, Ga., closed because of low enrollment and parents' inability to pay tuition.

Steve Ruzicka, executive director of the Association of Boarding Schools, says Southern Normal officials hope to reopen with classes this fall. He says plans also are under way in New Jersey to open a public boarding school.

"We are becoming a very much endangered species," says Percy L. Washington, president of Saints Academy and College, Lexington, Miss., which operated 65 years before closing in 1983 and then reopening in 1993. "It's a challenge. It's different because we are responsible for students 24 hours a day, seven days a week. We are responsible for all phases of their care. It keeps us going."

Overall, the Association of Boarding Schools says minority enrollments in private boarding schools are rising.

Still, Ruzicka says, "black boarding schools continue to serve a great mission in the American education system" because they meet the unique needs of some students. But he says families now have "a lot of free options available," such as charter schools and magnet programs. Charter schools typically are public schools that are being run by teachers or parents free from many state and federal regulations. Magnet programs are specialized public schools that concentrate on programs of high interest to the students - the arts, business or science, for example.

Piney Woods president Beady has witnessed the recent closings and has grown fearful.

"I worry about it all the time because I'm an advocate for boarding schools as at least a potential, partial solution to the academic mess that this country is in. It just makes sense to think of it from that standpoint," he says.

The 300 students enrolled at Piney Woods have their reasons for coming, whether it's the peaceful 2,000 acres lush with trees or the five fish-stocked lakes

and fully operational farm, or even the strict discipline and strong traditional curriculum.

A campus bell rings daily at 6 a.m., with breakfast promptly at 7 a.m. and devotionals in the chapel from 7:45 a.m. to 8 a.m.

Anthony Neal, 17, Dallas, likes being able to concentrate on his education without the distractions of gangs and drugs that permeate his home community. Khalil Ameen, 17, Birmingham, is learning independence, like budgeting time to work on campus, get his laundry done and study.

Sallome Hralima, 16, San Francisco, is following a family legacy that started with her grandfather, who "paid his tuition with a hog." Rolling her eyes in mock boredom, she says, "he tells me the story all the time."

The students come here from Mississippi, 22 other states and several foreign countries. Although middle-class, top-notch students do attend, Beady says, a secondary goal is to "take a youngster from a lower socioeconomic background and, if they want to get an education, make them academically competitive with any student anywhere. That's what we want to be about - the business of doing."

With 33 teachers, Piney Woods has a traditional curriculum and Junior ROTC. Principal Earnest O. Ward Sr. says classes are offered in two-hour blocks and grades are monitored on a weekly basis. Any student who makes less than a "C" during a week is placed on academic probation and cannot participate in sports or extracurricular activities.

The average senior score on the ACT - one of the two major college admission tests - is 18.3, compared with the national average of 20.9. "That's not bad," Beady says. "That's not where we want to be, but it's decent. We graduate 50 students a year and 49 or 50 will go off to college, some to the best in the country."

When Hralima graduates this spring, she plans to spend a fifth year at Massachusetts' Northfield Mount Herman, a private prep school. "At \$24,000 a year, my mom says I might as well just go to college. But there's so

"It's a very expensive system and there's no way the school systems could pay for something like this on their own," said Larry Mand, interim executive director of IUS' Office of Integrated Technology.

Last month more than 30 representatives of schools, hospitals and libraries met with Mand and other IUS officials to explore ways to bring

distance education to area schools

They plan to meet again this summer and eventually attempt a pilot project that could be expanded to several southern Indiana districts, Mand said.

"I was really, really pleased when I left that meeting," said Amy Schellenberg, director of curricular services for Greater Clark County schools. "I felt like there's finally going

to be some action."

Meanwhile, South Harrison is pushing ahead with a planned two-way transmission that would link South Central and Corydon Central High in Corydon. District officials hope they have the equipment - which costs \$15,000 - installed in time for the 1998-99 school year. ■

13. The Financial Times

05/01/97; Edition: London Edition; Section: NEWS: UK; Page 8

Cover-up claim fuels concern over EDS

By David Wighton, Political correspondent

EDS, the US-owned computer services group, is at the centre of allegations that problems with one of its government contracts were covered up while it was negotiating a controversial GBP 1bn deal with the Inland Revenue.

Staff at the Student Loans Company say they were told not to pass on details of the problems with EDS to the Revenue, before the signing of the contract in 1994.

According to documents obtained by Computer Weekly, the department of education suppressed allegations about the Student Loans contract, some of which it subsequently admitted were true.

In 1995, Mr Ronald Harrison, Student Loans Company chief executive, was dismissed for "financial irregularities" which formed part of the original allegations. Mr Harrison has consistently denied the accusations and is suing for unfair dismissal.

The claims of a cover-up will fuel concerns at Westminster about the apparent stranglehold EDS has over the outsourcing of government computer operations. The 10-year Inland Revenue contract has raised fears about the government's increasing dependence on EDS.

MPs have expressed worries that given EDS's size and dominant market position it could be seen as the only credible bidder for contracts such as the Revenue.

Anonymous allegations about EDS's performance on the Student Loans contract were first sent to the Commons Public Accounts Committee in October 1992, shortly after the government announced it was putting the Revenue's computer system out to tender.

The letters were passed to the National Audit Office and the department of education. But the audit office report on the Student Loans Company in July 1993 makes no reference to serious problems with the EDS contract.

Four days before the Public Accounts Committee was due to hold a public hearing on the audit office's report, Sir Geoffrey Holland, then permanent secretary at the department of education, asked the committee not to discuss the allegations publicly.

In a letter to Mr Robert Sheldon, the committee chairman, Sir Geoffrey said the allegations were motivated by a "grudge" and had "no foundation in truth".

The committee did not consider the allegations either in public or in private, and in November 1993 published a report which gave a favourable impression of the Student Loans Company's experience of EDS.

There is no suggestion that EDS tried to suppress reports of problems at Student Loans. EDS said it was glad that problems at Student Loans were eventually ironed out. However, the Student Loans Company did not renew its contract with EDS. ■

14. The Financial Times

05/02/97; Edition: London Edition; Section: NEWS: UK; Page 8

School exams system raises selection fears

By Simon Targett
Education Correspondent

A new age-sensitive system for marking the national curriculum tests taken by more than 600,000 11-year-olds, which would allow schools to group pupils according to ability, is to be introduced this month.

But the School Curriculum and Assessment Authority, which made the announcement yesterday, denied this was

tantamount to reintroducing the selective 11-plus by the back door.

In the past, pupils have received an actual test score, which allows teachers to rank them, and a criterion-referenced "level" score, which allows schools to monitor performance over several years.

Later this month, when pupils sit down to take their literacy and numeracy tests, they will also receive an age-standardised score, showing how

their performance compares with the performance of other pupils born in the same month.

Norm-referenced, the score is calculated by allocating 100 to the average pupil, allowing two-thirds of pupils to be in the range 85 to 115 and nearly all (95 per cent) in the range 70 to 130.

Pupils will be given marks for reading, spelling, mathematics and

mental arithmetic — although there will be no statutory requirement for teachers to pass on these marks to parents.

In guidance for teachers, released yesterday, SCAA said the new score will "give a more detailed picture of a pupil's potential", adding that it would "help identify pupils with special educational needs and those with exceptional ability".

Dr Nick Tate, chief executive of SCAA, rejected suggestions that this transformed the national curriculum tests into a new-style 11-plus exam. He said the timing of the test would not make it

"practical" as a selective tool of secondary schools.

Also, since the test was designed as "a progress report" providing "a snapshot of attainment", underperformance in the test would not carry the stigma of failure surrounding the 11-plus. "I doubt whether employers would pay much attention to performance in this test," he said.

But Dr Tate acknowledged that "in principle" the test could be used to separate pupils according to ability. "If it can be used for grouping within schools,

it can be used for selection between schools," he said. He added that the tests could become a selective tool if it was found to have "predictive validity".

Perhaps realising this, schools are taking the tests more seriously than ever before. SCAA revealed that teachers are actively preparing their pupils for the tests, even giving them past papers and timed exercises.

One curriculum adviser admitted that, as a result of this growing pressure, "some improvement in performance is expected". ■

15. CBS This Morning

05/05/97

Profile: Progress of Class of 2000 in its freshman year

JANE ROBELOT, co-host:

Well, the Class of 2000 is almost finished with its freshman year. Throughout this school year I've been spending some time at my alma mater, Wade Hampton High School in Greenville, South Carolina. This year has brought a rite of passage to many kids from childhood into the adult world. And for students, teachers and administrators, the stakes just got higher.

It's springtime in Greenville, South Carolina, and students at Wade Hampton High are finding it tough to keep their attention on the books.

Unidentified Student #1: It's stupido.

Unidentified Student #2: Yeah, stupido.

ROBELOT: The Class of 2000 seems to have survived the uncertainties of their freshman year. But now the pressure to be socially acceptable is being replaced by new worries.

SHEILA HERRERA (Class of 2000): The teachers give you lots more homework, and trying to get it all done, it is much harder.

JODI WILLIAMS (Class of 2000): I'm kind of worried about grades right now, like that I need to have to get into college and all of that.

ROBELOT: And as these kids begin their transition to adulthood, their focus is a lot different than when I went to school here.

Ms. JEAN WHITE (Honors English Teacher): They have encountered the adult world, I think, much earlier than I did. The papers used to be about, 'Should we wear seat belts? Should the school day be longer?' This one's on

assisted suicide. This one's on—the student feels that sexual offenders should be castrated. You know, they are approaching the adult world.

ROBELOT: These are 14-year-olds?

Ms. WHITE: These are 14-year-olds.

ROBELOT: Starting to think more about the year 2000?

WILLIAMS: Mm-hmm, definitely. My grandfather, he really wants me to get better grades and my dad's always bugging me about college. So I have to do well in school.

Mr. RUDOLPH GORDON (Superintendent, Greenville, South Carolina, School District): (From television footage) I believe the accountability plan...

ROBELOT: And the pressure to get good grades for college is also on for school administrators and teachers, in the form of a just-announced accountability plan.

Mr. GORDON: Our business is teaching and learning. And—and the accountability plan should focus on student outcomes. The best way to measure student outcomes is through test scores.

ROBELOT: South Carolina traditionally has had some of the lowest scores in the nation. Greenville's new accountability plan sets targets that schools will have to meet.

Mr. GORDON: We're concerned that—that we're not getting the best performance out of our students that we can. It's a plan that's designed to hold every staff member accountable for how well we do in providing quality education for all of our students.

ROBELOT: The heat is on.

Mr. GORDON: That's a good summation, I think.

Mr. ED SAYERS (Algebra Teacher): Some teachers may really feel threatened that their job is on the line. And, you know, when y—I guess when you get down to it, if your students personally—if your students aren't performing to the level that people say they should be performing, then I guess we are accountable.

ROBELOT: But talk to the kids about accountability and they say it's not all up to the teachers.

HERRERA: The most important part, it has to start in the home. It just can't be all left on the teachers and have the teachers lose their jobs because of that. Because it does start in the home. The parents are the one that have to put the example for the students, because if not, they aren't going to get anywhere.

MICHAEL HUSSEY (Class of 2000): Today's youth are the future of the world. Their knowledge and intuition will be what takes humanity beyond the year 2000. But in order con—to continue in the world, they must be skilled and prepared for life.

Ms. WHITE: ...and prepared for life. Many would argue that children today are not up to the work their parents accomplished with ease. But that is completely wrong.

ROBELOT: Jean White likes teaching ninth-graders. She enjoys helping them to learn to think for themselves. And she sees in this Class of 2000 a future full of promise.

Ms. WHITE: These kids are fairly

Hal Seamon, deputy executive director of the National School Board Association, said dissension between the top administrator and the board eventually damages a school system.

"Take the example of what we see when the Congress and president are squabbling. You see gridlock," Seamon said.

That's what happened last winter in Duval County, where a strong-minded superintendent much like Petruzielo battled with the School Board for more than a year. The dissension slowed efforts to improve the quality of classroom education and undermined teacher morale, said Billy Parker, a Duval County School Board member.

"When you don't know who's in charge, the wheels don't turn as well," Parker said.

There is fallout even if a superintendent survives a no-confidence vote.

"It's calculated public humiliation on the part of a board member," said Gail Bjork, a former Palm Beach School Board member. "It puts a chill in the district."

Bjork said her district suffered two years of dissension when board sentiment turned against Superintendent Monica Uhlhorn.

"If the superintendent doesn't have the confidence of the board members, then they're essentially ineffective," said Bjork, who supported Uhlhorn in the dispute. "Employees are really scared. It

really cripples a district."

Uhlhorn eventually was paid to leave before the end of her contract.

Such rocky relations between school leaders are increasingly common in the 1990s as officials with stagnant budgets strain to meet growing demands for better test scores and social services.

Superintendents in urban school districts last an average of three years - exactly Petruzielo's tenure, said Gary Marx, executive director of the American Association of School Administrators.

Florida, in particular, is hard on school administrators. State law makes the School Board ultimately responsible for education. However, it grants superintendents almost total independence to hire and organize their troops, Crawford said.

That means board members are increasingly dependent on the superintendent's staff to brief them on complex issues. In Broward, the staff has initiated or drafted nearly every policy proposal - and the three dissident school board members say they're kept out of the loop until it's time to vote on the plan.

Often, when a school board becomes disenchanted with a superintendent, the administrator is allowed to serve to the end of a contract. But it's become common to force them out ahead of time at great cost. That's especially true in Florida, where boards don't have the power to force out a superintendent before the end of an employment

contract.

Usually, the superintendent cuts a deal, leaving early to clear the decks for someone the board can work with. In Duval County, for example, former Superintendent Larry Zenke agreed to leave 30 months before his contract was to expire. In return, he got 42 months pay. Zenke also continued to work for the district as a consultant on desegregation matters, reducing the district's cost.

While buying out a superintendent's contract is expensive, it often is worth it, some observers say.

Rather than pinching pennies, it's often more important to control fighting that "takes away the attention of thoughtful educators from what is really important, which is the education of our children," Marx said.

But there is one other popular view: Strife is an uncomfortable but necessary product of democratic government. In fact, some dissension can help prevent bad policies from being enacted.

Rick Nelson, president of the teachers' union in Fairfax County, Va., watched one of the nation's most strife-torn districts dismiss its longtime superintendent.

"The founding fathers left us with a contact sport, but it's a system that works," Nelson said. "It is part and parcel of change, and we need change."

Staff Writers Ledyard King and Sarah Talalay contributed to this report. ■

45. Orlando Sentinel

05/04/97; Edition: CENTRAL FLORIDA; Section: LAKE SENTINEL; Page 4

MODERN SCHOOL STUDY TOOLS LAG; OFFICIALS SAID MOST CLASSROOM COMPUTERS ARE OUTDATED AND INTERNET CONNECTIONS ARE TOO FEW.

By Dave Weber of The Sentinel Staff

Umatilla High School has been building its collection of computers for years and now has 103 units to serve its 670 students.

That sounds like plenty of computer time for everyone.

But computers go stale quickly. Clear out the junk and only 19 units - fewer than one in five of the computers at

Umatilla High - are anywhere near up to date. Only 486 and Pentium model computers meet current classroom needs, officials said.

"These kids feel the computers are so old that they are being left out," said School Board member Mary Fletcher, who toured the school last week.

The story is the same in schools across the county, where the total number of

computers misleads about the number actually of use, officials said.

Classrooms and laboratories, where students are expected to learn the latest computer skills, are littered with the archaic 286 model and older computers. In an age when even 386s are stones around the neck of Internet surfers, 486 and Pentium units are in short supply in the schools.

writings were judged the best were taken on a field trip to the airport.

One student, sixth-grader Eric Espinoza, even researched how types of wood affect the speed of boats. He built two boats, one out of plywood and the other out of balsam. Using a rubber-band motor to race them, he concluded that light wood produces faster boats.

Students, too, spend time volunteering in their neighborhood by painting buildings streaked with graffiti and picking up trash.

They even published a bilingual booklet entitled "'Kids Guide to Health.' Working with medical professionals at the school's health clinic, the students provided parents with information about common childhood diseases. They also campaigned to encourage neighborhood parents to immunize their children.

"For me, the whole community aspect is really important because it makes them more civic-minded overall," said Kavaney, who graduated from Earlham College with a degree in biology. "They see themselves more as a member of the community, a working member of the community."

Barbic, who graduated from

Vanderbilt University with a degree in human development and English, had taught for one year in a large traditional middle school and one year at Rusk Elementary before joining forces with parents to request the middle school.

Barbic, like Garrett, saw too many of his good students go on to middle school and either lose ground academically or drop out. He decided something had to change or he was getting out of teaching. He opted for change.

"No one told us we couldn't do this," said Barbic, "and when your hands aren't tied, you are free to think and imagine things a lot more."

Later this month, the school board is expected to consider yet another proposal from two Milby High School teachers who want to open a small high school on the east side. The school, with an integrated curriculum and an emphasis on projects, would attract students in the Austin High School zone - including those from Project Y.E.S. and Project Chrysalis.

Stephen Simmons, 34, who started teaching science four years ago through the Teach for America program, said a

group of four teachers at Milby has already had great success with the concept, which, among other things, has students building alternative fuel vehicles and electric cars.

"We find that the students want to complete projects," said Simmons. "They want to have something they can point to and say, 'This is ours. We did it. We are proud of this.'"

Teachers like Simmons, Barbic, Garrett and the others are hoping that they too can point with pride to their successes, which will be measured in future years by the number of students they inspire to go on to college and get a degree.

For now, they are doing what they can to get them there.

"We came in on a mission of reform," said KIPP's Feinberg. "We came in already thinking if there is a better way, we need to try to find it. At the same time, we didn't come in thinking the entire system stinks, that we need to start from scratch. There are some amazing programs going on, and some amazing teachers doing those programs." ■

44. Sun-Sentinel Ft. Lauderdale

05/04/97; Edition: FINAL; Section: LOCAL; Page 1B

THE COST OF CONFLICT IN SCHOOLS; STRUGGLES BETWEEN BOARDS, SUPERINTENDENTS CAN BE LONG AND BITTER

BY BILL HIRSCHMAN

Education Writer

Staff Writers Ledyard King and Sarah Talalay contributed to this report.

To 17-year-old Nickell Hundesmarck, education is what happens in her Flanagan High School classroom, not 12 miles away at the Broward County School Board headquarters.

So, when the high school junior heard about the board's plan for a Tuesday vote of confidence on Schools Superintendent Frank Petruzielo, she had a simple question:

"I wonder if this is going to have an impact on me or is it just people arguing over power?" The answer isn't as clear as the question.

Petruzielo runs the nation's

fifth-largest school district, with 217,000 students and 21,000 employees. His job is to set policy and administrate within broad directives set by the board - not to drive a bus or teach a class. Even if Petruzielo loses the board's confidence, the buses will still run and teachers will still show up for class.

But if the superintendent is pushed out or left limping and ineffective by controversy, the ability to address the school district's ills - to move it ahead - would be lost.

It's impossible to predict how Broward school officials will settle their dispute. Board members Darla Carter, Lois Wexler and Miriam Oliphant say Petruzielo ignores them and wants only a rubber-stamp board, but they don't make up a majority of the board.

Petruzielo could keep the backing of a majority of the seven board members, and the controversy might melt away.

"You can rock on for a long time with a 4-3 (board split) as long as you have a solid four," said Douglas Crawford, executive director of the Florida Association of School Administrators. "On a lot of these boards, it's not uncommon at all to have only four votes on lots of issues."

Still, it's never easy to soothe feelings after such a nasty, public dispute.

"If you have a lot of animosity and awkward feelings at the top, it's going to put everyone in a stressful situation," said Poco French, president of the Broward County Council of PTAs. "It's going to eventually trickle down to the kids."

percent.

"I think that everybody takes these [tests] very seriously," said Madeline Taylor, director of counseling and testing for the district. "Teachers, students, and

parents all know it is a real high stake for the kids."

Staff writers Kendall Anderson, Liz Cardenas, Joy Dickinson, Dianna Hunt

and Laurie Wilson contributed to this report.

By Todd J. Gillman / The Dallas Morning News■

San Jose Mercury News

April 30, 1997

Teachers slowly learning educational software, Web browsers

BY ANNA BUCHMANN
Mercury News Staff Report

Despite massive investments in both volunteer labor and high-tech equipment over the past year, Silicon Valley schools have a long way to go before computers play a central role in most students' daily lessons.

Volunteers finished wiring 100 additional schools for Internet access on Saturday, the South Bay's third and final NetDay. More than 100 local companies and 11,500 volunteers have contributed to the yearlong \$30 million project, which has left an estimated 78 percent of schools in Santa Clara and San Mateo counties "network-ready."

But plugging software and the Internet into lesson plans is proving far more complicated than merely plugging in a modem.

Even teachers who boast up-to-date hardware in their classrooms and are trained to use it face a bewildering blitz of software choices — only a small proportion of which meets California's academic guidelines. And the Internet has proved an unwieldy and often confusing research tool.

Some pioneering educators have made huge strides in integrating computers into their course work. Still, teachers and school officials say, a true electronic curriculum has yet to emerge.

"A year ago we had nothing," said Marion Hatland, who teaches business and computer courses at American High School in Fremont. "It's still evolving."

East Palo Alto's Costano School, an early leader in the installation of multimedia technology, has faced many of the hurdles typical for schools trying to make computers a central part of day-to-day learning.

Costano is the school that lost its librarian and three students in a tragic fire that killed nine people in an East

Palo Alto house Saturday.

The school was wired for Internet access on the first NetDay in March 1996. Yet, because most Costano teachers have few computers in their classrooms, little experience with software and no time to explore, they rely on computer teacher Gill Patterson to provide activities that supplement their daily lessons. For example, he recently created a spreadsheet exercise for a seventh-grade math class to calculate the perimeter and area of rectangles in his computer lab.

But even Patterson is overwhelmed by the sheer volume of potential resources in software catalogs, as well as on CD-ROMs and Web sites. "There's so much stuff out there," he said. "I'm just learning about a lot of it myself."

Packaged software ranges from simple alphabet programs like Kid Pix to literacy programs like Reader Rabbit to more involved programs like Oregon Trail. And the Internet can provide everything from simple game-oriented shareware to entire course units from companies like Jostens and Computer Curriculum Corp.

But relatively few programs meet California content guidelines. Under a state project called the California Instructional Technology Clearinghouse, a team of teachers evaluates about 800 instructional software programs a year. Only about 10 percent of the titles receive a recommendation on the clearinghouse Web site, said Executive Director John Vaille.

Still fewer software packages meet California standards for a complete, yearlong course of study, said Donovan Merck, manager of the education technology office at the state Department of Education. Most companies, he said, are reluctant to design such programs for a small and cash-poor market.

Many instructors are not even aware that the state reviews programs. Instead, they rely on the Santa Clara County Office of Education or their school district to provide software or keep them up-to-date on what's available.

Most commonly, teachers browse catalogs, Web sites or software stores, choose a title that looks promising, and buy it — often with their own money. If it works, they share it with other teachers.

"It's impossible for a person to preview everything," said Bob Ball, technology coordinator at Terrell elementary school in San Jose. So Terrell teachers took their chances when the school recently bought \$1,900 worth of software from large distributors like Scholastic Software Club.

Teachers select library books in much the same way, Ball said — but it's much easier to browse a book than to browse a software program, and books cost far less than a typical CD-ROM.

In spite of the obstacles, teachers and students throughout Silicon Valley are exploring the potential of computers to enhance learning.

A group of Costano students used CD-ROMs and their own recordings to develop a multimedia presentation on the brain. Terrell second-graders studied volcanoes by watching a New Zealand eruption on the Internet. And seventh-graders at San Jose's Ida Price Middle School incorporated the American Heart Association and American Cancer Society Web sites in their biology projects and posted their work on the Internet.

But consider the behind-the-scenes efforts of Ida Price teacher Pat Stabile to make the biology project work.

Before putting her students on the Net, Stabile prepared a detailed list of questions to help them focus their

searches. She went out on the Web and found all the sites she wanted her students to use. Then she put those links on her own Web page, and had her students start their searches there.

Such preparation is necessary because her classes are only 43 minutes long, Stabile explained — hardly enough time for seventh-graders to browse the notoriously inefficient Web on their own. "If you are prepared and have screened the sites you're going to visit, you'll meet success," Stabile said.

When students do conduct their own Internet searches, their results are uneven at best.

Leslie Elmore, another Ida Price teacher, said her seventh- and eighth-grade journalism students regularly use the World Wide Web to find story ideas and information. But her eighth-grade language arts class has had less success.

Often, the students have found, the Internet simply is no substitute for an old-fashioned book. Student Jaemin Caplan searched the Net fruitlessly for his report on the lives of pioneers; Elmore finally directed him to the encyclopedia, where he quickly found everything he needed.

Dennis McConnell had a more disturbing experience: His search for information about the Ku Klux Klan resulted in recruitment offers. "They were trying to get me to sign up for it," he said. Elmore quickly steered him to other sources for his project.

With their extensive computer

training, teachers like Stabile and Elmore are the exception, not the rule in California, according to a recent study soon to be released by the state Department of Education.

The study of 1,200 schools aimed to discover how extensively technology is used in the classroom, said researcher Dan Weiler.

One of the main findings, Weiler said, was that "teachers around the state don't use computers for instruction as much as I thought they would." At 40 percent of the schools, he said, no more than a fourth of teachers use computers in their lessons.

For teachers to use computers regularly, Weiler said, they need up-to-date equipment located in their classrooms with a maximum of five students per computer. But his study found that the average student-to-computer ratio across the state was 15-to-1.

A survey taken after the first NetDay showed that Santa Clara County schools had a slightly better ratio of 10 students per computer. But the ratio is 26 to 1 for Internet-capable computers.

Even schools that have enough equipment often have trouble maintaining it, Weiler said. Only 12 percent of California schools have one or more full-time employees to provide on-site technical support, he said.

Hatland, the computer teacher at American High, said that while her district offers maintenance, she

sometimes relies on her own students or those in a vocational program to repair equipment.

Throughout Silicon Valley, there are efforts to help teachers make computers a more central part of learning. Smart Valley, the non-profit group that coordinates NetDay activities in Santa Clara and San Mateo counties, requires that all school districts create a technology plan that provides for teacher training and support. Cupertino Union School District, for example, holds monthly meetings to demonstrate a computer technology tool and how it can be used in the classroom.

The Santa Clara County Office of Education will sponsor its fourth Technology Institute this summer, where 1,500 teachers from 11 counties will learn to develop classroom-based Internet projects.

To encourage the creation of high-tech curriculum, Smart Valley held a competition called PC Day last year, awarding 3,000 computers to 364 teachers in November.

However, some of those teachers still haven't had time to take the machines out of the boxes — another sign that computers won't replace chalkboards any time soon.

"It definitely takes a serious commitment on the part of the teacher at this point to be really productive with these computers," said PC Day coordinator Teresa Hackler. "The computer is just the beginning." ■

Minneapolis Star Tribune

April 30, 1997

Poll finds divided support for school tax-credit plan

Rob Hotakainen / Star Tribune

On the surface, most Minnesotans love the idea of giving tax breaks to parents to pay for education expenses. But their support dwindles quickly once they've heard arguments for and against the proposal — school choice vs. tax money for private schools — according to the latest Star Tribune Minnesota Poll.

Initially, 72 percent of those who responded to the poll said they favor or strongly favor the plan. Only 26 percent opposed it.

But when interviewers read poll respondents a summary of the pros and

cons of the legislation, more were swayed by the argument against the bill than by the argument for it. Opponents say the plan "starts down the path of providing public tax dollars to private schools," while Gov. Arne Carlson says it would provide greater school choice.

After weighing both arguments, respondents were less enthusiastic about the plan: Only 47 percent said they'd be more apt to back it, while 49 percent said they'd be more apt to oppose it.

"The way I feel, it would have to be rejected," said Wendy Miller, 26, a poll

respondent from Monticello and the mother of two boys, ages 2 and 4.

The plan would offer tax credits of up to \$2,000 to lower- and moderate-income Minnesota families to help them pay for such things as tuition at private schools, or computers and tutors for children in public or private schools.

The proposal is a top priority for Carlson, who has threatened to veto any K-12 school funding bill that does not include the tax breaks. House and Senate committees have rejected the \$150 million plan, but the governor is not

New school horizons

Breaking new ground can be a rocky business.

Just ask parents and teachers at Windy Ridge Elementary School.

They encountered some serious stumbling blocks before winning approval to have Windy Ridge become the first public school in Florida to convert to a charter school.

Despite those obstacles, the southwest Orange County school has the potential to become more than a noble experiment.

If parents and teachers in the school zone approve the final contract, Windy Ridge could serve as an example of how to help middle-school students perform better.

The parents and teachers have the worthy goal of expanding to a school offering kindergarten through eighth-grade classes.

Windy Ridge, however, shouldn't be given significantly more money than other public schools to accomplish that goal.

That wasn't the intent of lawmakers when they agreed to allow existing public schools to convert to charter schools.

The intent of the charter-school law was to allow laboratories for change

unfettered by most state and local rules.

The state law authorizing charter schools, however, didn't take into account that school districts spread overhead costs among all their schools, the way businesses spread overhead costs among many departments.

Relying on that formula, Windy Ridge parents thought they would be getting \$140,000 more for their school. They didn't take into account such costs as maintenance, transportation, training, workers' compensation, liability insurance and legal services, which the district provides.

School district staff made matters worse by taking too long to explain to Windy Ridge parents and teachers how the overhead money is used and which services could be shopped for from other suppliers.

Windy Ridge supporters may argue that school districts should do a better job of cutting the costs of their overhead.

The place to force those savings, however, shouldn't be in the operation of charter schools. That would give an unfair advantage to the children in charter schools at the expense of children in conventional schools. If every charter

school could opt out of contributing toward a district's overhead, an unfair, two-tiered system would result.

The compromise reached by Windy Ridge and the school district offers the school the best start. For its first year, the school will receive financing similar to its current allocation — and the same level of service.

Windy Ridge, however, still will have an advantage over public schools in raising money. As a charter school, it will be eligible for more private donations and grants. Its governing board will be able to run its own lunchroom and hire its own custodians. If it can save money in those operations, it will be able to hire a new reading teacher.

District officials say they are committed to working in partnership with Windy Ridge. That's a promise they must keep.

Without unnecessary interference from the district, the school will have a chance to show what rules and regulations may be unnecessary. Windy Ridge's challenge will be to bring students to new levels of achievement without spending significantly more money than do other public schools. ■

57. New York Post

May 4, 1997

The Internet: No school remedy

Education is a field most vulnerable to faddish quick-fixes. But it seems that as our nation's school crisis worsens, the gimmicks politicians devise become ever sillier.

Consider President Clinton's latest pedagogic prescription: To "connect every classroom and library to the Internet by the year 2000." To that end, the administration has awarded schools in a number of states grants totaling \$11.8 million for the purpose of buying equipment and training teachers in use of the Internet.

And on Tuesday, the Federal Communications Commission will vote on a proposal by the President to give schools and libraries Internet service incentives worth some \$2 billion.

Given the damage to sound public

education that the U.S. Department of Education is capable of inflicting, these proposals seem relatively benign. Still, by distracting local school boards and administrators from real solutions to the problems they face, the White House infatuation with the Internet can only make matters worse.

The 'Net, essentially, is a tool. Properly employed, it can be quite useful. Unfortunately, it also has great potential for diverting teachers and students from more traditional learning venues — and, in any event, vast numbers of young Americans haven't yet mastered the basic skills needed to access the Internet effectively in the first place.

Recently, computer science professor David Gelernter wrote of a 1990 survey which found that 42 percent of this

country's high school seniors couldn't date the Civil War to within 50 years.

Another study, released earlier this year, ranked America in 28th place in mathematics, behind countries like Thailand, Hungary, Slovenia — behind even the international average.

There are, to be sure, a lot of good schools in the U.S. But there are many dreadful institutions as well — and nothing on the Internet will teach functional illiterates to read or innumerates to add. Such accomplishments require hard work by individual students, their families — and, especially, teachers.

Of course, rare indeed will be the day when the White House criticizes the latter: The National Education Association, the country's largest

Joan Bader in its ranks.■

54. The Orlando Sentinel

Tuesday, May 6, 1997

Letters to the editor

Fuzzy thinking

"My Word" writer Penny Villegas is off base in her defense of President Clinton's two-year extension, tax-paid college education. She teaches at Valencia Community College and extols the virtues of community colleges — and rightly so. However, she does not seem to grasp what an influx of students would do. She fails to see what floods of students into the public school system

have achieved — namely, reducing the quality of education while increasing the tax burden.

Florida is graduating "D" students and is unhappy about it, so Villegas seems to think that granting educational freebies at the college level will help. Fuzzy thinking to say the least.

Clinton's plan is just another ploy in

his "feel good" presidency, which will elicit another nice photo-op for an administration already in serious trouble. His plan is not thought out. It is not to "buy student's love," as she says; it is to buy their votes.

Louise Redner
ORMOND BEACH■

EDITORIAL

55. Portland Press Herald

May 5, 1997

EDUCATION IN AMERICA: Don't turn deaf ear to music and the arts

Maine's school budgets must be stretched if we are to fund well-rounded educations.

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Imagine the world reduced to nothing more than cold, hard facts and scientific notations. Imagine the world with no color, no imagination and no creative voice. If you can imagine this, you are visualizing the world devoid of diversity and ingenuity.

In towns and cities across the United States, school committees are struggling with increasing costs and less budget dollars available to meet the expenses of educating our children. More and more communities are faced with difficult decisions that have to be made in how they can develop good learning facilities for all young people and stay within their

financial limits.

How can academics be weighed with the arts? This is a difficult question to answer, and herein lies the struggle. Here are two very different styles of learning that are both vital to creating well-rounded young people.

It is true that academics are needed to provide the basics for attending college and pursuing a career in the working world. In this day and age, however, where so much emphasis has been placed on diversity, can we afford to pass up this aspect of our education?

What about the student whose interest is more in the arts than the academics? Might not the arts be the sparkplug for students to attend school? Can schools

afford to gamble the value of education by cutting the programs that are instrumental in maintaining a student's interest? We think not.

School committees need to reach deep within their resources to find ways to fund these vital programs within our schools. We cannot keep using what seems to be the most obvious solution to cutting costs by decreasing these programs. There must be an alternative. It is the responsibility of every student, parent and educator to provide an equal balance of knowledge between academics and the arts. — A. W.

You can contact us at The Portland Newspapers.

56. Orlando Sentinel

Tuesday, May 6, 1997

education market

By Neil Gross in New York, with bureau reports

At first, Anthony Amato thought someone was playing a bad joke. The community superintendent of New York City School District No. 6 in Harlem had flown all the way to Redmond, Wash., to check out Microsoft Corp.'s plan to put thousands of notebook computers in schools.

When he arrived, he was shown a video of upper-crust Australian schoolchildren using Microsoft spreadsheets. "Here was this beautiful school with well-manicured children talking in prim English accents," recalls Amato, whose district spans some tough streets in Harlem. "God knows what would happen if our kids walked down the street with notebooks under their arms," he remembers thinking. But that evening, Amato had an abrupt change of heart. Whatever the challenges, he decided, his students deserved the latest technology. TD A year later, parents in District No. 6 are thanking him for the decision. On any given morning, 20 fifth-graders in the Harlem pilot program are plotting graphs on Toshiba notebook computers using Microsoft Excel and clipping them into Word documents. Parents are learning how to use the computers, too—and splitting the cost with the school. "We've had overwhelming support from the community," says Amato, beaming.

He's not the only one smiling: Fifty-one other American pilot schools are getting upbeat results in the same program, called "Anytime Anywhere Learning." Kathy Klock, curriculum director at the Snohomish School District in Washington State, says engineers who visited one of her fifth grade classes were blown away by PowerPoint presentations given by young students. Not surprisingly, Microsoft and its co-organizer—Toshiba America—are also enthusiasts. "This program enhances critical thinking skills, and the way children analyze data," says Kathryn Yates, director for K-12 at Microsoft's Education Customer Unit, which supports teachers with online materials and technical help.

Adds Toshiba America program manager Thomas J. Healey: "The children learn to work with tools that they will use throughout their lives." As the program gears up, Microsoft could

take its biggest step yet outside the business market. But there will be hurdles. Historically, Apple has dominated the school market and still holds a 51% stake, according to a survey by New York's IDC/Link Inc. Apple executives are skeptical about notebooks in schools.

"They're not rugged enough," says Apple Computer Inc. marketing manager Robert H. Kondrk. Instead, he's offering schools a sturdy version of the Newton PDA called E-Mate for \$699. Anytime Anywhere participants address this issue by coaching children on how to care for computers. In Harlem, parents help patrol children going to and from school. So far, none of the 52 pilot schools has reported a case of theft or loss. Schools and parents in the Anytime Anywhere program purchase or lease their notebooks from Toshiba resellers. Hardware and software are discounted, as are service and insurance contracts. The only real guidelines in the program: Notebooks must be high-end models that the students have available 24 hours a day.

And students must learn their way around a business suite called Microsoft Office (table, page 92). **STALLED HOME MARKET.** If all this sounds a little self-serving—coming from Toshiba and Microsoft—it probably is. Penetration of PCs in American homes is stalled at about 40%, so hardware makers like Toshiba are scrambling to seed new markets. Believe it or not, Microsoft faces a similar challenge. Its hugely successful Office package—worth about \$3.3 billion last year—has close to 90% of the market for business suites, according to International Data Corp., a market research company. But growth isn't accelerating. "Where do you get new users?" asks IDC consumer software analyst Mary Loffredo Wardley. **CONSTRAINTS.** Enter the education market, which bears a striking resemblance to the corporate market. "Schools have line-items that say 'software,'" says Wardley. "Money is pre-budgeted, and decisions to purchase are made at a high level." The Anytime Anywhere approach also suits school agendas, she says, because the National Bureau of Educational Standards is asking teachers to go beyond math games to programs that impart higher-order skills.

"When you use graphing software, you see relationships, and you can make predictions," Wardley says. Indeed, Microsoft's timing seems perfect. The Washington (D.C.)-based Software Publishers Assn. expects U.S. schools to pump about \$4 billion into software and computer gear this year. Software will likely account for just \$494 million of the total. But the number is bound to grow. Last October, Congress allocated \$200 million for the President's new Technology Literacy Challenge Fund, aimed at upgrading technology in schools. State and city matching grants will double or treble the total grant value.

Big chunks of Title One antipoverty grants are earmarked for the same purpose. And on May 8, the Federal Communications Commission is expected to mandate discounts of up to 90% on Internet access for schools. After that, districts may try to get more Net-ready PCs on school desks. This gush of grants and discounts springs from a strong bipartisan movement to prepare students for the high-tech workplace. Microsoft's new thrust into schools is in perfect synch with its emphasis on portable technology that parents and students share.

"It's a well thought-out program," says Anne Bryant, executive director of the National School Board Assn. (NSBA) in Alexandria, Va., which contributed expertise to Microsoft early on. School districts are struggling to bring parents into the learning process, she points out. "One portable computer per student is every educator's dream." How big could the new notebook initiative become? In a word, humongous.

About 52 million children are enrolled in public elementary and secondary schools, according to the National Center for Education Statistics (NCES). Another 5 million attend private schools. Every child is a target and every parent a potential cheerleader. "The response from parents has been phenomenal," says Mirian Acosta-Sing, principal of the Mott Hall School for gifted children in Manhattan's District No. 6, which Microsoft has used in videotapes and brochures to publicize its initiative. Microsoft's success in the schools is practically guaranteed, say education market analysts, since teachers are already enthusiastic about its Office suite. Quality Education Data—a

Denver-based education research firm—did an intent-to-purchase survey before Microsoft even dreamed up Anytime Anywhere. Recalls Jeanne Hayes, president and CEO of QED: "Microsoft Office was at the top of the list." Australian teachers who have run a similar program for six years are among the most persuasive advocates for the new initiative. About 20,000 Australian children now tote notebooks to school each day. The teachers' reports from the front lines—conveniently packaged in Microsoft's public-relations material—dazzle American educators.

"The children help their friends with difficult programs," exults Ken Rowe, principal of Frankston High School in Melbourne, who is on a whirlwind tour of U.S. schools arranged by Microsoft and Toshiba. "They take control of their own learning." If America has fallen behind, its high-tech multinationals intend to help it catch up. As Anytime Anywhere spreads, other PC companies are certain to jump on board. Compaq Computer Corp., for one, already has a program in place to make high-end

notebooks available to college students at very competitive prices. "This is something we could do in K-12 schools as well," says Sue Collins, Compaq's director for education marketing. Telecom service companies are also gearing up. Over the next five years, AT&T alone will spend \$150 million to train teachers and help usher more schools into cyberspace. "Today, 45% of private-sector employees must use high-technology tools in the workplace," says Joan Fenwick, director of the AT&T Learning Network, which disburses the funds. In 2000, she says, the number will exceed 60%. "This investment is critical to our economic future." To help Anytime Anywhere, AT&T has given six months of free Internet service to the Mott Hall School in Harlem. That's a perfect gift for Yaa-Afryie DuBerry, 10, a laptop-wise African American in the pilot program. She scrolls quickly through a PowerPoint demo of her story on how human beings got taste buds. Pausing for a minute, she defers credit for the animations. "It's clip

art," she says. "I only had four days to put it together." Just imagine what she can accomplish in the next 10 years. TBL Setting Up a School Laptop Program. DOES EVERY CHILD IN THE CLASS NEED A NOTEBOOK? It helps. Students will use the computers for most subjects at school and to complete assignments at home. HOW MUCH DOES THE COMPUTER COST? Typical leases run about \$70 a month, including service and insurance. Purchase prices start at about \$2,000. WHAT KIND OF HARDWARE IS BEST? Pilot programs all used Toshiba color laptops, but any durable machine will do. CD-ROM drives and fast modems are recommended. CAN CHILDREN TAKE CARE OF THEIR LAPTOPS? To be safe, lease terms should include insurance and provisions for "loaner" machines. DO TEACHERS NEED SPECIAL TRAINING? Yes. Australian teachers with the most experience recommend a year of training. Fortunately, children also teach one another. ■

14. The Seattle Times

05/04/97; Edition: FINAL; Section: NEWS; Page A2

HIGHER ED: TIME FOR A REMODEL?

By CHRISTOPHER BURNS
AP

AROUND THE WORLD, expectations about post-secondary education are vastly different from the way they are in the United States.

PARIS - Philippe Jollant stood up in his poetry class at the Sorbonne, stalked out to a sunny Latin Quarter cafe, fed up with yet another boring lecture.

"The Sorbonne is like an old chateau, a bit sclerotic," complained Jollant, a 26-year-old modern literature student who had enough of a professor pushing the classics in a dull-green classroom without any high-tech study aids.

A report on higher education by the Organization for Economic Cooperation and Development, the industrialized world's official think tank, predicts swelling enrollment and the need for new curricula. Once the domain of a privileged few, education is democratizing rapidly.

The 10-nation report, obtained by The Associated Press, praises some U.S.

schools as a model in adapting to change. It says other countries need to rethink post-secondary education to keep up with advancing technology, accommodate students and fight unemployment with a better-skilled work force.

Authors of the study struggled with the question of who should pay.

Governments are strapped for cash, business involvement has its limits, and, in European countries especially, boosting tuition has triggered student unrest.

"Europe is in a real dilemma here," Malcolm Skilbeck, the study's chief author and a former university administrator from Australia, said in an interview. He cited Europe's approach that "students should have access to knowledge free of charge."

Among his study's proposals are deferred payments, loans and work-study programs - measures Europe has yet to widely adopt.

Once a "distant goal for a small minority," higher education could soon reach 80 percent or more of the

population, says the study, which examined several European countries, the United States, Australia, New Zealand and Japan.

In some countries, the deluge is already here.

Jumping enrollment

From 1985 through 1994, enrollment among 18- to 21-year-olds jumped from 25 percent to 40 percent in Canada and from 19 percent to 33 percent in France, the study says.

In the United States, enrollment of 26- to 29-year-olds rose from 8 percent to nearly 10 percent.

Among the trends: an expansion in off-campus "distance education" by TV or computer, work experience studies and specialized technical schools that serve regional business needs.

The study notes criticism by students and teachers "of policies that suggest institutions are behaving too much like commercial enterprises."

A consumer mentality?

But the report also observed a trend of schools looking at "the student as the

Free Speech and the Internet

Is the Internet a serious threat to children that justifies Government censorship under a clumsy Congressional concoction called the Communications Decency Act of 1996? Or is it a distinctive, democratizing forum for worldwide conversation warranting maximum First Amendment protection? The Supreme Court is now weighing these questions. It ought to reject the idea that the transmission of information on the Internet should be limited by the state.

In one of the most significant cases this term, the justices are to rule by summer on the constitutionality of the 1996 act, which makes it a felony to knowingly transmit indecent material over the Internet, where youngsters may see it. If the law stands, it would effectively reduce communication on the Internet to a level judged appropriate for children, and make inadvertent criminals of adults and children alike.

Congress held no hearings before adding these ill-advised Internet restrictions to a broader telecommunications bill. By striking them down, the Court would honor free speech and send a useful message to lawmakers to tread carefully before intervening in this constitutionally sensitive realm.

The Court has often seemed torn when addressing First Amendment issues in the context of new communications technologies. In a splintered decision in a cable television case last June, for example, it timidly declined to apply the strict scrutiny that usually is required for government regulation of speech content. At least four justices seemed to lean toward a dangerous approach that grants more leeway to control the message when a given technol-

ogy reaches large numbers of people. Millions of Americans now have access to the Internet.

Fortunately, the justices have a sound blueprint to follow in last year's eloquent decision by a three-judge panel in Philadelphia that blocked enforcement of the 1996 act. After hearings that amounted to a crash course on the Internet, the panel correctly determined that Congress had placed unconstitutionally vague and overly broad restrictions on what adults can publish and see.

The panel also rejected the Government's argument that the Internet should be viewed similarly to TV and radio broadcasting, for which some speech restrictions have been allowed. Its decision noted a critical difference. While children can come upon explicit material simply by turning on a television, computer users must actively search out the material they want to see. As a practical matter, because the Internet is a global medium, no domestic law can effectively protect children from inappropriate material. Moreover, the availability of software that parents can use to block or filter transmissions means the Government has failed to meet its burden of regulating speech by the least restrictive means.

Last week's decision by the Supreme Court upholding content-neutral rules requiring cable broadcasters to carry local over-the-air broadcast stations was encouraging. Though the Court split 5 to 4, the justices seemed unanimous that Congress must have a persuasive justification to impose content-based restrictions limiting free speech. On that ground, the Communications Decency Act surely fails.

BOSTON HERALD

APR 5 1997

NetDay: Part Two

Imagine, right now, on this second Massachusetts NetDay, some 7,000 volunteers are in the process of distributing and installing millions of dollars in computer equipment and wiring to Massachusetts schools. These are ordinary people with computer expertise who have given up half their weekend so that Massachusetts students can go on-line.

The computers and tables and software have been donated, too, by companies like Lotus Development Corp., Sun Microsystems, BankBoston and California-based 3Com Corporation, which made a \$1 million donation.

Before last Oct. 26, Massachusetts' first NetDay, the Bay State ranked second to last in the nation in networked classrooms. The event, a kind of volunteer marathon, was modeled

after a California program and the goal was to wire 400 Massachusetts schools to go on-line.

But only about 140 schools out of some 1,500 in the state were hooked to the Internet that day, so the non-profit Mass Networks stepped up to the plate and planned a second NetDay.

Now computers aren't a cure for all the ills of our educational system. But in the hands of a savvy teacher and linked to the Internet through a reasonably fast modem, they can be a marvelous, unique tool for learning.

Some people contend there are no heroes anymore. They're wrong. There are thousands of them out there today logging machinery, tacking up wiring, installing software and teaching training programs, so that Massachusetts students can access the world.

technology

POINT OF VIEW

The Internet and Education: a Close Fit

By Neil L. Rudenstine

Is the educational promise of the Internet real? I believe it is.

The cluster of technologies that we know as the Internet powerfully reinforces and extends some of the most effective traditional forms of university teaching and learning. On many campuses, it is already having an impact more dynamic and pervasive than that of any previous breakthrough in information technology during this century. And the transformation in progress is only beginning to unfold.

It's worth recalling that, in an earlier age, the specter of huge libraries filled with countless books raised anxieties not unlike those we today associate with the Internet — concerns about how to cope with overabundant information of mixed quality and how to avoid encouraging antisocial or even unhealthy behavior.

As early as the 18th century, Diderot looked upon the rapid proliferation of books and foresaw "a time ... when it will be almost as difficult to learn anything from books as from the direct study of the whole of the universe."

"The world of learning," he feared, "will drown in books."

No less ominously, a 1795 German treatise on public health warned that excessive reading induced "a susceptibility to colds, headaches, weakening of the eyes, heat rashes, gout, arthritis, asthma, apoplexy," and a host of other disorders, including "hypochondria and melancholy." Fresh air, frequent walks, and washing one's face periodically in cold water were prescribed for solitary readers.

It was feared, moreover, that excessive reading could lead to a society of dysfunctional misfits. What was to prevent students from disappearing into library stacks for days on end, pursuing a subject from shelf to shelf, unable to discriminate among different volumes or to absorb more than a small fraction of the information available on a given topic? And what was to prevent

less-disciplined students from browsing their lives away in sweet procrastination?

Although historical parallels are never exact, I expect that over time we will gradually resolve most of our anxieties about the Internet, much as students and faculty members have learned to regard large libraries, filled with innumerable books and journals, as a familiar, manageable, and essential part of their lives. The sheer novelty of the Internet will subside. The tools available for readily identifying relevant, reliable information are likely to improve. The world of learning will not become lost in cyberspace, I suspect, any more than it has drowned in books.

Yet the question remains: What makes the new technologies worth embracing? Why should institutions of higher education undertake the major investments that are involved? What makes the Internet more than just the latest in a long chain of technological innovations — including radio and television — that have transformed other aspects of society, but fallen short of inflated expectations in the realm of advanced learning?

To begin with, we see evidence of rapidly expanding educational use. Whether one considers the number of academic institutions or courses with sites on the Internet, the content and dimensions of those sites, the number of "hits" registered by a given home page, the volume of academically significant materials coming on line, or the volume of e-mail messages transmitted each day by faculty members and students, it's clear that we are experiencing a phenomenon of rare magnitude.

More fundamentally, there is a very close fit — a critical interlock — between the structures and processes of the Internet and some of the main structures and processes of traditional university education. The new technologies act as a powerful

supplement to, and reinforcement of, forms of teaching and learning that faculty members and students for decades have found to be especially effective. Let me offer a few illustrations.

* *The Internet can provide access to essentially unlimited sources of information not conveniently obtainable through other means.* We are witnessing, in other words, a dramatic expansion of the capacities historically associated with our great research libraries. We do not yet have the electronic equivalent of a comprehensive card catalogue for on-line materials, or of reference librarians to guide us patiently through a seeming infinity of virtual stacks. But as such capabilities evolve, the library and the Internet will be viewed increasingly as a versatile, unified system, providing an enormous variety of materials in different formats and media — so that data, texts, images, and other forms of information can be easily accessed by students and faculty members alike, and readily manipulated in new ways. Indeed, we are already well along this path.

* *The Internet allows for the creation of unusually rich course materials.* Recently, I reviewed one of a new generation of Net-based multimedia case studies being developed at Harvard Business School. The case, focused on the production problems of an Australian-run sock-manufacturing plant in China, features not only standard text, but also on-line interviews with company executives, videos of the production process, interactive spreadsheets that allow the student to gauge the implications of varying production schedules, hypertext links to relevant reference materials, and so forth.

Through these and other elements of this electronic course pack, the

-more-

Internet cont.

student is able to experience the business environment in a much more vivid, textured, nonlinear way – an approach that captures the multilayered and untidy reality with which the plant's managers and workers must actually contend. The human and social context of the business enterprise – not just its operational and financial elements – comes to life. As this example only begins to suggest, the Internet holds the potential to be an exceptionally fine tool for creating densely woven, unusually engaging, and highly demanding new course materials. Such materials are rooted in traditional forms of pedagogy, yet are enhanced by the new technologies.

** The Internet enhances the vital process of "conversational" learning.* We all know that the daily exchange of ideas and opinions among students, and between students and faculty members, is one of the oldest and most important forms of education. People argue and debate, listen and react, and sometimes even discover common solutions to difficult problems.

The Internet creates an array of new electronic forums for such conversational learning. Communication takes place at all hours, across distances, among people on campus and beyond. Instructors can hold supplementary "electronic office hours" and moderate on-line discussion groups, unbounded by time or place. Students, even those who are reticent in the classroom, can put forward their hypotheses and invite their peers' reactions, or describe a problem they are struggling to solve and solicit suggestions from others.

Sustained, direct human contact is absolutely essential to serious education, and always will be. Ultimately, there is no effective substitute for "live," face-to-face interchange. Nonetheless, the Internet permits a significant extension of the scope, continuity, and even the quality of certain forms of interaction, even though electronic communication will always lack critical elements of "real" conversation.

** The Internet reinforces the conception of students as active agents in the process of learning, not as passive recipients of knowledge from teachers and authoritative texts.*

Let me oversimplify for a moment. For a century or more, evolving theories of education have stressed the role of the student as an active learner

– someone who asks questions, searches for relevant information, discusses ideas with others, and generally moves ahead as an investigator, discoverer, or adventurous scholar-in-the-making. Faculty members play a vital role in the process, stimulating students to ask the right questions, to seek answers in rigorous and imaginative ways, to re-examine their assumptions and provisional conclusions, and to connect their thoughts to a larger set of principles and ideas. But an essential part of the driving force is expected to come from the students.

The Internet dovetails with this vision of learning. It calls upon the user to be active and engaged – following leads, distinguishing the substantial from the trivial, synthesizing insights drawn from different sources, formulating new questions. Seated before the computer, a student is challenged to make something happen, to act or pursue, rather than merely react or absorb. Such an approach holds particular promise in an era when students, more than ever, will need to sustain the capacity for serious learning throughout their lives and careers.

In short, the Internet has distinctive powers to complement, reinforce, and enhance some of our most effective traditional approaches to university teaching and learning. We should embrace those capacities, not resist them. To be sure, there is always reason for caution when circumstances are changing so quickly. We need to find the right pace of change to achieve the best results. We must not let the intriguing potential of the new technologies drive us headlong toward innovations that erode rather than strengthen education. We must not undervalue the continued need for books and other tangible documents, or neglect the irreducible importance of sustained, face-to-face human contact in learning. But neither should we mistake what is happening for a mere fad or mirage, and fail to realize the transformative possibilities of the new technologies.

Excellent information and effective vehicles for communication are fundamental to virtually everything we do – in universities and in life – but they are not the essential stuff of education. All the information in the world will be of no avail unless we can use it wisely. In the end, as we know, education is a fundamentally human

process, a matter of values and significant action, not simply information or even knowledge.

The Internet will not tell us, for example, what to do about individuals and communities that cannot afford to be on the Net. It will not show us, any more than our libraries full of books have shown us, how to create humane and just societies. For this, we need – as we always have needed – human minds, human values, and human action. It is how we address such questions – of purposes, of aspirations, of the consequences of our choices on real human lives – that will finally determine the effectiveness of our new technologies for higher education, and for the society it serves.

Neil L. Rudenstine is president of Harvard University.

Do Computers Help Children Learn?

They are being used in classrooms in new ways. Could it be done better?

BY LYRIC WALLWORK WINIK

COMPUTERS ARE FAST becoming the fourth "R" in American education. Today, eight in 10 Americans say that teaching students computer skills is "absolutely essential," according to Public Agenda, a research organization. High school graduates who aren't computer literate are "not going to get jobs—it's just that simple," one Cincinnati man told the surveyors.

But in an era when some public schools face shortages of textbooks and one New York City school even asked a computer company to help purchase desks for students who had been sitting on the floor, computerizing the classroom may not be as easy as it sounds.

And new questions about computer use in schools are being asked, including: Are they valuable tools or just high-tech gadgets? Should they be in one "computer lab" room or spread throughout the classrooms? Do teachers have enough training to use them well?

Quantity is not always quality. While most agree that students need basic computer skills, some experts caution that not all computer time is quality education time. "If teachers aren't sure how to use computers in their curriculum, and the computer—not the child—is dictating the questions and answers, then I'd rather not have computers in the classroom," said Susan Haugland, a professor of child development at Southeast Missouri State University. Haugland studied preschool children who had used computer drill programs designed to develop reading skills. She found that they had a 50% drop in creativity and no significant improvement in learning how to read.

Another potentially troubling report comes from the 1994 National Assessment of Education Progress test in American history. Fourth- and eighth-graders who used computers almost daily in history classes scored 14 to 18 points lower on the history test than students who never or only rarely used computers. "Computers can be a resource in the classroom," said Haugland, "but they are not going to solve all our educational problems."

Yet there is compelling evidence that computers *can* have a positive effect in the classroom. In fact, one program suggests that technology may offer new ways to engage students, including some considered "at risk."

As part of a pilot project at the Maxwell Middle School in Tucson, Ariz., situated in an economically depressed area plagued by gang violence, Microsoft and Compaq donated software and computers for 500 students. Four specially trained teachers used computers to teach every subject, and the kids were allowed to take the laptops home. In just one year, absenteeism dropped and standardized test scores rose 11% to 25% among the computer students. "We were hoping just to familiarize kids with computers," said Pete Higgins of Microsoft, who worked on the project. "But the kids actually became more engaged in school. It's pretty inspiring."

He added, "It also raises the question of what's better for kids—spending an hour in a computer lab or carrying a computer around all the time like a pencil."

More...

Help Children

continued...

A computer in every classroom—is it possible? Providing a computer to every student is a daunting financial task. In Summit, N.J., the Mayor's Partnership for Technology initially planned to spend \$5 million to purchase laptop computers for all 800 high school students and 100 teachers by 2001. But the project has been scaled back simply to provide computer access to all high school students and teachers. To do that, Summit still must raise \$2.5 million in private funds.

To make the project succeed, teachers have to be trained, and basic questions must be answered, including: How can the computers be kept safe during the school day, how can they be recharged, and what will happen if a laptop is lost or broken? Last fall, six teachers and 55 students began a pilot program to explore these issues. "We're just beginning to identify and ask all the questions, let alone answer them," said Michael Knowlton, Summit's school superintendent.

The Internet. While schools wrestle with what role computers should play inside their classrooms, many also are trying to reach the world *outside*, via the Internet. Across the nation, states have held "Net Days" to wire schools to the Internet. California held two Net Days in 1996, which organizers compared to a "high-tech barn-raising." More than 50,000 volunteers installed more than 6 million feet of cable in K-12 classrooms. "What heartens me is to see schools, communities and businesses coming together, recognizing the need for technology in schools," said Carole Teach of the California Department of Education.

Still, in California there is only one Internet-connected computer for every 73 students. Wiring all of the nation's classrooms could cost up to \$6 billion.

One state leading the way into this new electronic world is Missouri. A statewide computer network named MOREnet (Missouri Research and Education Network) will connect 950,000 students to each other and to the Internet by 1998. Already, 474 districts have high-speed data circuits and toll-free access to the Internet. Teacher training is part of the project, which is receiving \$12 million from the state.

MOREnet also will link secondary schools to 44 higher education institutions and 136 public libraries and will provide Internet access to all Missouri government agencies for residents from terminals in town and civic centers. "Connecting schools with wires and circuits is only a small piece," said William Mitchell, MOREnet's executive director. "Training teachers and other users, providing technical support and information databases are essential to our success."

Using MOREnet's Internet links, fifth-graders have "discussed" the state's 1993 flood with children around the globe. Third-graders have exchanged information about Missouri's climate and geography with students in Alaska. Perhaps the biggest impact has been in the state's rural school districts. At East Prairie (Mo.) High School, English students once rode a bus 50 miles to a library. Now they can go online.

What should parents ask? Just seeing computers in a school doesn't guarantee that the machines are being used well. Here are some questions to ask:

- How much time do students spend using computers, and how are they supervised? Who answers questions?

- Does the school have a technology plan? What are its priorities (buying more machines, connecting to the Internet)?
- Are computers used to help teach subjects, such as math or writing skills, or for activities outside the curriculum?
- How are teachers trained?
- Who monitors or safeguards children on the Internet?
- What kinds of software are students using? Is it appropriate for different ages and skill levels?

"It's important that parents monitor the type of computer work their children do," said Susan Haugland. "You want variety and challenges," she added, not simple repetition.

"Computers have so much potential for changing the way we teach and learn that we need to refine and fine-tune how we use them," said Michael Knowlton. "We will have both failures and successes, but it's exciting because it has so much potential." [E]

Lyric Wallwork Winik writes about education, politics and social issues.

Increasingly, the Internet Combines Education

By Andrew Trotter

As use of the World Wide Web grows by leaps and bounds, the culture of cyberspace is being shaped increasingly by advertising, say veterans of the easy-to-use, highly visual region of the Internet.

Educators must take heed to prepare children for the barrage of ads they will encounter on-line, experts caution.

The early growth of the Internet was fueled by scientists, educators, and hobbyists who delighted in the free sharing of information. They have now been joined by companies offering information on their Web sites to entice people to spend time in the presence of advertisements and, ultimately, to spend money.

"The Internet started with a circle of gifts—you would take something from the Net and you'd give something back," said Jean Armour Polly, the author of the *Internet Kids' Yellow Pages*, published by Osborne McGraw-Hill.

"Now it's 'How can you get eyeballs to come in and look?'—that's the rub," she added.

Still, companies know Web visitors expect freebies, and some commercial sites "have fabulous content," Ms. Polly said.

Registering Information

For example, the Crayola Web site offered by Binney & Smith Inc. shows how crayons are made "which is really quite interesting," she said.

And the site for one brand of breakfast cereal features an adventure game that tests children's knowledge of endangered species, she added. At the same time, Web advertising is becoming more potent, as companies gain new methods of tailoring ads to individual users.

Many commercial Web sites, including some for children, require users to register to have full access to the site, said Shelley Pasnik, the director of children's policy at the Center for Media Education, a Washington think tank.

By registering, the user supplies a variety of personal information, such as age, gender, hobbies, and electronic-mail address, which may be compiled and sold to e-mail marketers. Or the data may

be recorded in a "cookie," a software device stored on the user's computer that then tracks what the user does at the site and can be read by the Web site on subsequent visits.

A cookie can be helpful if it allows the Web site to tailor information to the user's interests, Ms. Polly said. It can also be used to target advertising or to build marketing databases.

Web browsers can be set to warn users when cookies are created; users can also delete them.

Another important change in

the Web has to do with the methods people use to find information.

"Search engines"—Web sites such as Yahoo! and Excite! that are used to find other Web sites—sift through millions of Web pages and retrieve lists of those that are relevant to key words supplied by the user. But many search engines now use the same key words to specially select ads that appear on the user's search screen.

And some search engines allow companies to pay a fee so their Web site will be prominently displayed

With Advertising

within the lists of relevant sites, said Ms. Pasnik, who is the co-author of a study last year of Web-based marketing to children. She said this practice could lead students astray in conducting on-line research.

Teachers have been very concerned about the issue of pornography on the Internet and the need to protect children from the potential dangers of Internet encounters, Ms. Pasnik said. But few educators have tackled issues such as exposure of children to advertising, the invasion of students' privacy, and the blending of advertising and content on the Web.

Web advertising shouldn't be banned, Ms. Pasnik added. But teachers and their students need to think critically about what they see, to understand how the technologies work, and to be "somewhat leery of the content they encounter."

On the Web

For links to these and other Web properties, click on **This Week's Links** at <http://www.edweek.org>.

about half black and half white. The national board has 6 minority members out of 23.

The group has no schedule for growth, but officials say they get up to about 10 inquiries about possible new chapters a week, and hope to be active in all 50 states before long.

"There are a host of worthwhile organizations working to improve particular schools," Mr. Molpus said. "We can be the voice for systemic reform at the school district level around the

country. If that happens, I think you'll see some of the divisiveness along racial and class lines healed."

Still, most chapters depend on the efforts of a small core group, and local leaders of Parents for Public Schools are wary of grand claims.

In addition to the forces pulling white and middle-class minority students from public schools, they say, is the simple factor of time: parents involved in their own lives and schools can find it hard to stretch to find energy for such an

organization.

"It is swimming against the tide, but that doesn't mean we have to sink," said Margaret Hulbert, president of the Cincinnati chapter. "Parents for Public Schools provides so much emotional and intellectual support. It's easy to look at the problems of the schools and say, 'Why bother?' It really helps to know other people are finding ways to make things work."

04:45 EST April 16, 1997 ■

USA Today

April 16, 1997

States struggle to pay for timely textbooks

By The Associated Press

Sally and Kevin Flood know what textbooks cost. With four children in Indianapolis public schools, the family paid \$400 this year to rent books at one-fifth their price.

With 44 million children in public schools, textbook costs rising and competition from computer purchases, families, states and school districts are struggling to make sure there are enough textbooks to go around.

In New York alone, Gov. George Pataki says, the state must double the \$114 million it now spends on books. Indiana Gov. Frank O'Bannon campaigned last year on a promise of free textbooks but now is pushing a tax credit for families who rent them.

In Louisiana, a lawsuit alleges the textbook shortage is so acute that poor school districts teach foreign languages on the blackboard or use books showing Richard Nixon as president - if the page hasn't fallen out.

In at least seven states, students are charged a fee that includes the purchase or rental of textbooks.

And when Louisiana Gov. Mike Foster this year proposed spending \$75 million for computers, critics were outraged.

"We need to look at purchasing textbooks before we get into the computer business," said state Rep. Warren Triche. The state House is looking into textbook shortages.

School officials in other states complain about restrictions that force them to buy expensive books from state-approved lists even though they plan to use other materials.

In an unscientific but widely publicized poll by the Association of American Publishers, half of all high school teachers complained they could not assign homework for lack of books.

The same poll found that a quarter of all teachers reported using books more than 10 years old.

Publishers say less than a penny of every school dollar is spent for books.

Americans spent \$16.1 billion in 1994 on pet food, compared with \$2.1 billion on schoolbooks. ■

USA Today

April 16, 1997

Technology rewrites the book on school primers

By Stuart Glascock
Special for USA TODAY

Not too long ago, dedicated students buried their heads in the gray pages of basal readers, pored over math formulas and studied science and history lessons that had little connection to their daily lives.

That won't cut it for today's students, who are growing up with music videos and computer games.

Students hitting the books today

encounter a color-splashed array of charts, maps, graphs, photos and materials designed for interactive learning. And technology is pushing the pace of textbook change.

Advances in desktop publishing and color printing have combined with trends toward more engaging styles of teaching to produce textbooks with a visual edge.

"Printing technology has affected content in a positive way," says Jim Chapman, executive editor at text

publisher Houghton Mifflin Co. "It has given us opportunities to create books where the visual content and instructional content are much more integrated."

But today's children expect more than just exciting books. Nearly all textbooks roll off the presses destined to be bundled with extra learning products and classroom tools -- maps, charts, kits for hands-on projects, video discs and other multimedia software.

"Just reading straight, dry text doesn't

cut it anymore," says John Thorpe, who oversees textbook selection for the 47,000-student Seattle School District.

Instead of buying science textbooks, Seattle schools recently adopted a series of science kits that teach hands-on experimentation. The instructional materials are oriented around topics such as water, motion or magnetism. Simple materials include balls of string, rubber bands, incline planes and other common items that make desktop experimentation possible, Thorpe says.

To bolster interactive teaching styles, Seattle schools also deploy math texts that devote fewer pages to formulas, Thorpe says. They emphasize viewing math as active, interesting and relevant to everyday problem solving. Social studies texts rely less on straight, linear chronologies and focus on people and events in history.

"You don't see too much of the old basal reader," Thorpe says, adding that the change in instructional materials reflects a shift in teaching strategy. In

general, there's less lecture and more participation and activity in class.

Last year, McGraw-Hill School Division launched a World Wide Web site (<http://www.mmhschool.com>) offering support for teachers and a range of new texts. One of those, *A New View*, is a literature-based, reading/language arts program for elementary children that features culturally diverse literature.

It integrates spelling, the writing process and grammar in the reading skills lessons. Supporting materials include word-building kits, language, phonics and spelling books, plus audio cassettes and assessment guides.

The publisher's Web site serves up tips for teachers in a teaching resource area and links to Web sites related to material in the books. Updates of social studies material are provided for teachers to download. Such Internet usage is increasing, says Steve Dowling, president of McGraw-Hill School Division.

Changes in textbooks' structure aren't

always welcome, and many educators don't like what they see.

"Textbooks are getting more and more watered down," says Nancy Walker, a 20-year speech teacher in Dallas high schools. "They have more summary, less substance."

Educators aren't the only critics. Most school districts ask parents and community members to review texts before the books are chosen, giving concerned citizens some say in the selection process.

"I was appalled at some of the books we were shown for children," says Kathleen Turner, a parent who served six years on the Jefferson County (Colo.) School District's book review panel. "We had some terrible books for junior high that were comic book style. We rejected them."

But Dowling says the new books still do the job. "We haven't dumbed down texts," he says. "We've just presented information differently." ■

TRADE

Education Daily

April 16, 1997

HIGH COURT SPLIT OVER TITLE I IN CHURCH SCHOOLS

US. Supreme Court justices seemed deeply divided yesterday on whether to overturn their 1985 ruling that bars public Title I teachers from parochial sites.

During arguments in two related cases from New York City, four justices voiced serious reservations and fears of opening a Pandora's box of church-state problems. Four other justices are either on record favoring Title I services in religious schools, or are leaning that way.

The remaining justice, Anthony Kennedy, wondered aloud if school districts' financial and logistical problems providing Title I services for parochial students at neutral sites justify setting a new legal precedent.

Kennedy, often a swing vote in split decisions, also has said the Court's previous ruling may have been wrong

(ED, June 28, 1994).

Two Wrongs?

To complaints from the New York City school district's attorney that Title I mobile classrooms are cramped, noisy and impractical, he said that didn't mean allowing public employees in the religious buildings should be legal.

"That doesn't mean there's no Establishment Clause violation, does it?" he said.

The district and parents of parochial school students are appealing the Court's decision in *Aguilar v. Felton* (473 U.S. 402), which says public school teachers offering instruction in religious schools violates the Constitution's clause that government must not establish a religion (ED, Jan. 22).

In *Agostini v. Felton* (96-552) and *Chancellor v. Felton* (96-553), school district attorney Paul Crotty said the

district's cost of providing mobile classrooms parked near religious schools has topped \$100 million in the past 10 years.

And acting U.S. Solicitor General Walter Dellinger, representing the Education Department, said ED spends about \$300 million annually "in dead-weight loss" overhead expenses under the \$7 billion Title I program to comply with *Aguilar*.

Open Door

The strongest voice on the Court for overturning *Aguilar* yesterday was Justice Antonin Scalia, who called the notion of prohibiting government services in parochial schools "an absolutist view."

Dellinger argued the Court already opened the door for public school services in religious schools four years ago in *Zobrest v. Catalina Foothills*

BALTIMORE SUN, Feb. 28, 1997 A 11

A university campus in which bits and bytes replace bricks and mortar

By WILLIAM R. BRODY

FOR THE PAST CENTURY, American universities have provided extraordinary leadership, and Johns Hopkins has been a leader among that group. Now the question confronts us: What must we do to continue our role as a premier research university?

For we find ourselves in the midst of a profound reordering of the political, social and economic fabric of our global village. It is fueled by dramatic advances in science and technology. Facing this, we must ask ourselves how to preserve the fundamental tenet of the university: the freedom to explore new ideas no matter how bold, no matter how much they challenge the established dogma.

Can we provide a high-quality education, one that prepares our students for careers that have not yet been imagined, when we are faced with extraordinary pressures to make our education more "relevant" — that is, to prepare our students for the jobs of today? At the same time, we must make this education more affordable. Can we do it?

I believe we can, but it will not be an easy task. We are in the middle of a revolution. It has been brought about by the new manner in which knowledge is generated and information disseminated. And the university is at ground zero of this information explosion. The force of these changes is so powerful that we must adapt or lose our relevance to society.

Those who predict the demise of the university from the new proliferation of bits and bytes are perhaps missing the point. To be sure, the university, and the research university in particular, will have to be configured very differently in the 21st century. Exactly how this difference

will manifest itself we cannot predict with certainty.

Fundamentally, we must come to understand that we are just one player, engaged in a worldwide effort to expand and exploit knowledge. It is a pursuit that is no longer the exclusive domain of the universities. There is a very "knowledge industry" outside our doors now — it is the foundation of the new economy — and that industry is in the midst of cataclysmic changes.

For our part, we need to acknowledge that universities are no longer the sole focus for the creation of new knowledge. Neither will we have exclusive rights to provide education and training.

As universities, we must remake ourselves in the context of this new information age. This calls for a process, not a single event. It is a process bound to last longer than the term of one university president. But it is a process that, irrefutably, is already under way.

In the course of events that are to come, I would suggest that several areas bear particular attention. The first of these is the way we organize and access information. The academy is changing its role as the central, physical repository of our civilization's intellectual content.

To understand this change, we need to distinguish between information and knowledge. We are in the so-called "information age." This age is quite different and distinct from what I would call the "knowledge age." Perhaps if we're lucky, the knowledge age will come next.

In the information age, the progress of analog and digital communications technology from telephone and radio to television, satellites, faxes and computers, has increased our access to information at a dizzying rate. I am amazed whenever I read an article about the joys of instant access to information through the Internet. Are there really people out there who crave more information crossing their desk or their desktop?

Information overload

Uncontrolled information has become a burden, not a resource. Who among us fails to suffer from information overload? With hundreds of cable-TV channels added to the proliferation of newspapers, magazines, scholarly journals, books, to say nothing of junk mail, one hardly has time to waste surfing the net.

In fact, what we crave is better access to knowledge, not information. Knowl-

edge is content that is assimilated, collated and interpreted to provide a unique perspective that helps us perform a task, solve a problem, or stimulate our intellect. The paradox of our times is that we are inundated by information, yet starved for knowledge....

Central to our mission as a research university is the way in which we discover new knowledge and disseminate that knowledge through education. How will the information age change the way we carry out that mission?

I believe there are three ways we may be affected. First, I think we will witness the transformation of the university from a physical campus, or specific geographic locus, to a dispersed, virtual campus.

It will be a university campus in which bits and bytes replace bricks and mortar; one in which scholars and students can communicate and collaborate electronically without the necessity of proximity. Such a network of scholars can preserve the essence of our Hopkins "hand-tooled" education envisioned by Dr. Gilman, one in which the student is stimulated to learn by working closely with a faculty member to find answers to unsolved questions.

Second, the university will need to expand its horizons to become more global in its outlook and its outreach. This must include the way we reach students, an increasing number of whom will come from other countries. It means we must also provide a truly international education to our U.S. students. We have already established our presence in other countries as well, providing innovative programs for both American and international students.

And third, and perhaps most funda-

mentally, we must view the educational process not as a finite encounter lasting a few semesters, but as a life-long continuum. During this process, there is a term of intensive collaboration — mentorship, if you will — in which we educate students in "learning how to learn." These are the traditional undergraduate and graduate years. They will be followed by repeated, periodic encounters with Hopkins faculty for continuing education and training.

This, I believe, is the new paradigm of post-secondary education. The pace of discovery is so rapid today that one cannot accumulate sufficient knowledge in a four-year undergraduate curriculum to fuel a lifelong career. Or more probably, a lifetime of several careers. We must make a commitment to lifelong learning for our students....

More...

BRICKS AND MORTAR, continued...

we hope it will continue into the foreseeable future. But already, many of our students and faculty are geographically dispersed. We must, therefore, redefine the university community more globally, with connections between scholars and students that transcend simple geography.

This article is excerpted from the address given by William R. Brody Sunday at his inauguration as president of The Johns Hopkins University.

What all of this demands, fundamentally, is a new approach to our understanding of the university. In the past, and up to this day, the word university has meant, primarily, a place. The ivy-clad walls. The stately clock tower. The manicured grounds. We need to change our mind-set that the university exists only as a physical place.

To be sure, traditional residence-based education has significant merit and

SACRAMENTO BEE FEB 28 1997

DAN WALTERS

Another jolt on education

A couple of years ago, California was embarrassed by the revelation that its fourth-graders were tied for dead last, with those from Louisiana, in reading on national achievement tests.

The news jolted Californians out of their complacency and produced the beginnings of a movement to restore schools to some semblance of adequacy — much less the excellence that was once their hallmark.

The state got some more bad news Thursday about how its youngsters aren't learning. The National Assessment of Educational Progress (NEAP), whose testing confirmed the failure of California's trendy but wrong-headed "whole language" approach to reading, revealed that California's fourth-graders aren't doing any better in mathematics.

The 1996 testing revealed that 54 percent of California's fourth-graders were performing below basic levels of proficiency, the same level as 1992 and tied for fourth worst in the nation. Only kids in Louisiana, Mississippi, Guam and Washington, D.C., did worse.

Gov. Pete Wilson said the new NEAP results "should be a wake-up call for every educator, parent and elected official in our state" and called for the same return-to-basics reforms in math that had earlier been decreed for reading.

As it happens, the new math test results are being released just as a fierce political squabble over math curriculum is being played out in the Capitol. Janet Nicholas, a Sonoma County vineyard operator, was appointed by Wilson to the state Board of Education and dared to confront Department of Education bureaucrats over the design of a new elementary math curriculum.

That has led to an effort by the math bureaucracy to deny Nicholas confirmation by the state Senate, a clandestine campaign that was abetted — her public protestations notwithstanding — by the state schools superintendent, Delaine Eastin. Eastin, who has declared neutrality on Nicholas, clearly wanted to use her nomination as a vehicle to demonstrate to the state school board that it should curb its independent impulses on policy issues.

The NEAP scores, if nothing else, demonstrate that the educational bureaucracy has been as dead wrong about steering children away from old-fashioned basic math skills as it has been about reading. Just this week, Eastin's predecessor, Bill Honig, told a meeting of educators at Stanford University that after the phonics approach to reading was destroyed during the early 1980s, he came to realize that it was a mistake, but found it nearly impossible to overcome bureaucratic resistance to change.

The math curriculum wars have followed a similar course, with educational theorists insisting that old-fashioned computational skills be subordinated to touchy-feely concepts, what some have dubbed the "new-new-math." It was Nicholas' resistance to the bureaucracy and her insistence on appointing some math basics advocates to a curriculum committee that led to the underground effort to kill her nomination. The Senate Rules Committee will hold a showdown hearing on Nicholas next week, with the outcome uncertain.

"It's time to do for our math curriculum what we're doing for our reading curriculum," Wilson's educational adviser, Marian Bergeson, said Thursday as she released the NEAP test scores she termed "very dreadful."

A generation of innocent and helpless children is being educationally crippled and California will feel the effects for decades in terms of crime, welfare dependency and lack of workers for the highly technical jobs of the 21st century.

It will take years, untold billions of dollars and a top-to-bottom overhaul of curriculum to set things right. But nothing, absolutely nothing, is more important to the future of this state.

DAN WALTERS' column appears daily, except Saturday. Mail: P.O. Box 15779, Sacramento, 95852; phone: (916) 321-1195; fax: (916) 444-7838; e-mail: dwalters@sacbee.com.

A New Way of Teaching for a New Generation

By Joe B. Wyatt

LAST summer, my three-year old granddaughter, Berkley, took me on a tour of her CD-ROMs with the same ease that she introduced me to her menagerie of stuffed animals moments before. The mouse she used to navigate through the icons of Windows 95 is as much a part of her young life as the tattered stuffed version in her personal zoo.

She's equally at home with her well-worn copies of "Curious George" and "The Cat in the Hat," and she shows no signs of information overload. Quite the contrary. Her vocabulary and understanding have been enriched rather than frustrated by her robust environment. And the same is true for her playmates.

Even today, these children of the '90s, as fluent in technology as their grandparents were in shop and home ec, are flooding out of our best high schools only to be frustrated by archaic teaching practices in America's colleges and universities.

Likewise, growing legions of working adults worry they won't be able to hold the most basic jobs without intensive training in technology. These workers, like today's high school grads and like Berkley and her generation, need new approaches to teaching and learning. Nothing less than the economic and educational future of this country is at stake.

Faster change

Quite simply, those of us in American higher education need to change the way we think about teaching and learning experiences. We need to do it at something faster than the speed of light. Higher education must learn to change the way it does business, in part because we believed the quality of teaching at our finest institutions was truly outstanding. At the same time, we have taken on faith the ability of technology to make broad, systemic changes in our learning systems.

But that hasn't happened. Cost, accessibility, and entrenched cultures have stepped in whenever real change

threatened to occur. Now, the global infrastructure of the Internet has erased barriers, and the urgency of the challenge has galvanized many reluctant interests. It is up to America's colleges and universities to make up the difference.

Why should higher education carry the burden? Because we educate the school teachers and university professors. We train the professionals. We perform virtually all the research on knowledge transfer. Higher education sets the intellectual standards for all of education.

We have to start by competing with ourselves, and not becoming complacent with our successful track record. Several once-dominant American industries - among them steel, automobiles, and mainframe computers - have gone to the brink of extinction by mistaking market dominance with a permanent monopoly. If you're the leader, change becomes difficult, especially one that undercuts your market share. Past experience tells us, though, that in an open economy someone will inevitably introduce change - and if it's not you, then your enterprise can become history in a hurry.

Asynchronous learning

One of the most promising developments is the growth of asynchronous learning, which allows students to begin and end their "classes" on their own schedules through the use of network technology. They can create their own study groups and consult with faculty members. Valuable class time once spent on administrative chores or rote learning can be redi-

rected to more valuable interaction, since reading and lecture materials are available at any time from the class's Web site.

Last year I challenged Vanderbilt's deans to develop at least one new degree program using technology as the primary delivery mechanism. One result is a new program at the Owen Graduate School of Business. Starting this year, Vanderbilt will offer an MBA program to executives from South and Central America who will meet face to face with their faculty four days a month for two years, with network-based asynchronous learning available at all times.

This program will complement the existing executive MBA program, in which students meet in the traditional classroom format two days a week, every other week, for a two-year period. And, of course, the traditional two-year residential MBA will continue to be the foundation of Vanderbilt's business education program. The same faculty will teach all three programs, using a mix of network technology and traditional methods. As a result, we will be able to compare the performances of the three. We also have the beginnings of an economy of scale that puts us on the road to a new paradigm.

More than a passing fad

Other departments at Vanderbilt are developing similar initiatives, and many other universities are either studying, or actually using, network-based technology to enhance the higher education experience. This is not a passing fad - an educational Hula-Hoop. This is a fundamental change in the idea of teaching, learning, and training that our universities and colleges must embrace and shape to their own ends. The alternative is a generation of bright, motivated, but ultimately frustrated young people becoming part of an ill-prepared work force.

Berkley and her friends deserve nothing less.

■ Joe B. Wyatt is chancellor of Vanderbilt University in Nashville.

MORE SCHOOLS ONLINE, BUT DISPARITY PERSISTS

A new Education Department survey shows 65 percent of public schools had access to the Internet in fall 1996, but schools with high numbers of low-income and minority students were less likely to be online.

Only 53 percent of schools where 71 percent or more students are eligible for the free or reduced-price lunch program--a poverty indicator--were connected to the Internet, according to a study released over the weekend by ED's National Center for Education Statistics.

Among schools with the lowest proportions of low-income students, 78 percent had Internet connections.

Similarly, 56 percent of schools with at least half minority enrollment had online capabilities, compared to 65 percent of schools with less than 6 percent minority enrollment.

President Clinton, cited the report during his weekly radio address, as he

touted his school technology grant program for states, one of the foundations of his education agenda (ED, Feb. 6).

"To give our children the best education we must help them to harness the powerful forces of technology," he said.

"That's why we've challenged America to connect every classroom and library to the Internet by the year 2000." While the number of all schools reporting Internet access increased 15 percentage points over 1995, the number of classrooms with connections remains low (ED, Feb. 22, 1996).

Only 14 percent of instructional rooms have Internet connections. And students aren't getting as much access to the new technology as teachers and administrators, the study shows.

Of the 89 percent of the schools that have access to the Internet, 94 percent

made the service available to teachers, 86 percent made it available to administrators and 74 percent allowed students access.

Clinton also announced the first recipients of ED's Technology Literacy Challenge Fund. Illinois, Mississippi and New Mexico will share \$14.3 million to buy computers, provide Internet access and train teachers on the new equipment. The grants are the first installment of the \$200 million program Clinton wants to raise to \$500 million next year (ED, Feb. 7).

"Advanced Telecommunications in U.S. Public Schools, Fall 1996" will be free in March from Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pa. 15250-7954, (202)512-1800. Cite NCES 97-944. It is now online at <http://www.ed.gov/NCES/pubs/97944.html>. --Rebecca S. Weiner ■

HOUSE MAY RELEASE STATES FROM IDEA MANDATE FOR FELONS

The chairman of a House education panel says he wants to give states the option of not providing special education services to juveniles in adult prisons.

Rep. Frank Riggs, R-Calif., said in an interview last week that he wants to lift the federal special education guarantees for youths "who are tried and convicted as adults and are incarcerated in adult prisons." In the past four years, the Education Department has ordered 26 states to start providing special services under the Individuals with Disabilities Education Act (IDEA) to young convicts.

Just a few months after agreeing to comply with IDEA and start educating disabled youths in their adult prisons, one California official argued before the House Early Childhood, Youth and Families Subcommittee that compliance will rob schools.

"This will divert funds for special education from our schools, and we don't like that idea," Gregg Harding, deputy

director of support services in the California Department of Corrections, told Riggs' subcommittee on Thursday.

ED monitors found last year the Golden State was not educating disabled convicts between the ages of 16 and 22 in its 29 adult correctional facilities. The department required California to comply or risk being ineligible for its IDEA grant in fiscal 1998, and California's Education Department agreed (ED, Jan. 24).

Rep. Robert Scott, D-Va., questioned Harding repeatedly at the hearing, wondering if withholding education services would increase the number of repeat offenses among convicts who had served their terms.

Scott's questions prompted Harding to soften his stand by saying Congress should finance the education of incarcerated youth with disabilities if it deems the service mandatory.

Currently state IDEA grants are based on the number of children served,

but the House wants to base the formula on population and poverty statistics.

Stephen Steurer, executive director of the Maryland Correctional Education Association, agreed that failing to educate young, disabled convicts in adult prisons would increase recidivism. But he added that Congress should lift the IDEA mandate for prisoners serving short sentences, or life sentences without parole.

On one hand, state prison systems lack the time to evaluate and educate felons with disabilities who would serve short terms. On the other, Steurer added, educating felons sentenced to long terms "is inappropriate and wastes valuable special education resources." The House Education and the Workforce Committee plans to vote on IDEA legislation in March, while its companion panel in the Senate has not slated a vote. --William J. Cahir ■

Technology Meets Some Special Needs

Devices, Software Help Disabled Students Overcome Obstacles to Learning

By Robert O'Harrow Jr.

Washington Post Staff Writer

With a little help from her teacher at Falls Church High School, Rachel Shilling adjusted the microphone on her headset, leaned toward a laptop computer and spoke to it in a cheery voice. "Wake up," the 16-year-old told the machine. "Begin dictate mode."

The 10th-grader spent the next hour working on a paper about South American history, operating the computer through voice commands because she has almost no use of her hands.

Her spoken words about Incan civilization appeared as neat sentences on the screen. When she made a mistake,

she simply told the machine to go back a step or two.

Rachel, whose hands are soft and bent because of a congenital defect, started using the special software known as Dragon Dictate a few months ago. Before that, writing meant struggling to hold a pen in her limp fingers. Now she can write papers and do other schoolwork much more easily, and she is thinking more seriously about going to college.

"This is a great thing. It makes me more independent," said Rachel, the first Fairfax County student to use Dragon Dictate in school. "Now I can be like other students."

Rapid improvements in technology are changing the landscape of special

education, enabling thousands of disabled students to surmount once-formidable obstacles to academic success.

In schools across the Washington area and elsewhere, there are devices that provide electronic voices for children who can't speak. Computers offering Internet access for those who can't type. Software that guides students with severe learning problems through research projects. Machines that produce sounds to help blind students interpret curves on graphing calculators.

Much of the technology, such as machines that respond to voice commands, has been around in some form for years. But recent improvements in

computers' speed and memory, coupled with the software industry's sharper focus on the needs of disabled students, have made such equipment more effective and available than ever before.

"The technology is allowing kids with disabilities to become real participants in the classrooms, the schools and communities. They can really be taught, in the best sense of the word," said Fred Orelove, executive director of the Virginia Institute for Developmental Disabilities at Virginia Commonwealth University, which conducts research on special education.

But even as the potential benefits from technology grow, Orelove and other specialists warn that problems loom.

Much of the equipment is expensive, and Washington area school officials are struggling to curb special education budgets that have soared in the last decade for various reasons.

Fairfax officials estimate they will end up spending at least \$10,000 on Rachel's machine, the software inside it and the months of training she needs to use it. The county's overall budget for special education technology and training has increased about 60 percent in the last five years, from \$253,000 to \$407,000.

Under the federal Individuals With Disabilities Education Act, first approved in the early 1970s, public schools must provide the services that a child with disabilities needs to learn. With the act now up for reauthorization, the National School Boards Association and other groups of educators are pressing for new rules that will clarify what kinds of technology schools must buy and how that equipment will be paid for.

"The growth of technology is providing tremendous opportunities. But we also must be realistic about the costs," said Michael A. Resnick, a senior association official. He added that cities and states need to take on some of the financial burden from

local school systems. "What we want recognized is that there is a difference between what is appropriate and what is state-of-the-art."

In several cases, parents already have clashed with school officials over what technology their disabled children are entitled to and how much the students would benefit from the equipment.

In Montgomery County, a parent recently asked school officials to provide her 8-year-old disabled child with a \$3,000 laptop computer, even though the child cannot type or read. After much negotiation, the county

agreed to provide a word processor that costs about \$200.

Another parent of a child with multiple disabilities threatened legal action against the Montgomery school system if it did not buy an \$8,000 communications system. That case is unresolved.

"That's a big problem for us," said Denise DeCoste, administrator of a program for special education technology in Montgomery. She said parents sometimes have unrealistic expectations about what new machines can do for their children.

"Parents are ever hopeful that technology will be the key that opens doors for their child," she said. "And sometimes that materializes, and sometimes it doesn't."

There's no doubt that the number of children using such equipment has increased sharply in recent years. In Fairfax, 904 students now receive special technology training and equipment, three times as many as did five years ago. In Montgomery, the number of new requests for such assistance was 100 last year, compared with 25 in 1991.

More and more software developers are tailoring their products for disabled children, said Ellen Schiller, an analyst at the U.S. Department of Education. Some of the innovations.

More...

Technology Meets Some Special Needs

continued...

developed with grants from the agency, were featured at a national conference in the District two weeks ago. There were speech synthesizers, low-cost captioning for videos and a computer program to teach reading to young children with a variety of disabilities.

For several years, Trinh La, an 18-year-old Fairfax student who is blind, has had a machine that reads aloud every word she writes so she can keep track of her typing mistakes and prints out her notes in

braille. This year, she got a new feature that provides audible clues about whether the curves she calculates in math class are going up or down.

Trinh, a senior at Robinson Secondary School, said all this helps her keep pace with her classmates—and fit in better.

"With the new technology, I'm able to turn my papers in on time. In the past, I would tell the teachers, 'Could you wait for another day?' . . . It was embarrassing," Trinh said. "Just because I'm blind doesn't mean

I can't do what's expected of the rest of the class."

Eric Dormer, a 17-year-old who can't speak, walk or use his arms, two months ago began using powerful new software that allows him to operate the Windows program on his laptop at Paint Branch High School in Montgomery.

Eric chooses a letter or command from a list on the computer screen, by using his head to hit a switch on the back of his wheelchair. It's a laborious process, but with a little more practice, he soon will be able to send messages on the county's e-mail system.

In Prince William County, 12-year-old Matthew Renfro, who cannot work on a keyboard or speak clearly, also uses a switch to pick letters displayed on

the computer screen. His computer has a program that anticipates the next word he might want to use in the sentence he is writing, lists some possibilities and then says the words aloud.

Matthew has had such software for several years, but a new feature that scans his work sheets and reads them aloud makes it possible for him to do homework more quickly. That makes him feel like he's keeping up with his peers at Stonewall Jackson Middle School in Manassas, his parents said.

"It gives him pride. It gives him a sense of accomplishment, a sense of belonging," said Matthew's father, John Renfro. "He can't feed himself. He can't dress himself. So anything he can do for himself significantly enhances his life."

The experiences of all of these children are being closely monitored by educators, who hope to learn how to make school life even easier for disabled students in the coming years.

Rachel Shilling, the Falls Church High sophomore, would be the first to say that being a pioneer is not always easy. A single move during a game of electronic solitaire demands a long series of spoken commands: "Button click, mouse right, stop, mouse up, stop, mouse left, stop, drag down, button click."

"It's fatiguing," Rachel said.

But she said she believes that what she is getting from Dragon Dictate makes it worth the effort. She said she hopes that computers and other devices will create so many possibilities that students like her no longer will be preoccupied by their limitations.

"If technology keeps going the way it is, it'll be easy for everyone," Rachel said, "and no one will have to worry anymore."

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Schools Given \$14.3 Million For Computers

Clinton, Gore Award Grants to 3 States

By Stephen Barr
Washington Post Staff Writer

President Clinton and Vice President Gore, saying significant progress is being made in linking U.S. schools to the Internet, yesterday released the first installment of \$200 million in grants for computer equipment and training.

Joining Clinton on the president's weekly radio broadcast, Gore announced the Education Department would award Technology Literacy Challenge Fund grants worth \$14.3 million to Illinois, Mississippi and New Mexico.

"Communities will use these funds to equip classrooms with computers, link schools to the Internet and train teachers in new information technologies," Gore said.

Clinton also issued a federal report showing 65 percent of public schools have access to the Internet. But, the president added, "it is not enough to connect every school. We must connect every classroom and every library as well."

The report by the National Center for Education Statistics, based on a fall 1996 survey, showed that only 14 percent of public school "instructional rooms," such as classrooms, computer labs and libraries, were linked to the Internet.

Classroom connections are limited, said Linda Roberts, the Education Department's director for educational technology, because most

schools still rely on modems, a device that connects a computer to a telephone line.

As more schools install special leased lines designed to carry data at high speeds, she said, they can create their own computer networks and place cyberspace connectors in classrooms.

The survey of more than 900 public schools also found that only 20 percent of teachers "used advanced telecommunications" and that schools "with high levels of students in poverty were less likely to be connected to the Internet."

Clinton, who made a campaign pledge last year to put every student on the "information highway," used the radio address to mark the first anniversary of the Telecommunications Act.

He said the Federal Communications Commission "is now developing a plan" that would allow most schools to get a 50 percent discount on a wide range of telecommunications services, including Internet access.

The three states receiving grants yesterday were the first to submit plans and have them approved. Clinton plans to distribute \$200 million in grants this year. His new budget seeks \$500 million in grant funding for next year.

In the Republican radio address, Sen. Don Nickles (R-Okla.) said Republicans agree on the need to improve education, "but we do question the wisdom of just adding more federal programs."

Nickles said the government operates about 760 education programs, including 32 literacy programs. "Shouldn't we focus on fixing what isn't working now?" he asked.



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Contact: David Thomas
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CLINTON, GORE CITE PROGRESS IN WIRING NATION'S SCHOOLS

President Clinton in his weekly radio address today used the first anniversary of the Telecommunications Act to present new data showing the nation is making steady progress toward the goal of connecting all schools to the "information superhighway" by the year 2000.

According to a survey by the U.S. Department of Education's National Center for Education Statistics, the number of schools connected to the Internet has nearly doubled and the number of classrooms has more than quadrupled since 1994.

"We are making a lot of progress," Clinton said. According to the data, 65 percent of America's schools are now connected to the Internet. "That's almost double the number of schools connected in 1994," Clinton said. "But it is not enough to connect every school; we must connect every classroom and library as well. Since 1994, we have more than quadrupled the number of classrooms with a direct link to the Internet. But the vast majority still do not have access."

The data showed that the number of classrooms, computer labs and media centers with access to the Internet has increased from three percent in 1994 to 14 percent in 1996.

"That's good progress, but we have a long way to go," said Vice President Al Gore. "That's why I'm happy to announce today on the Telecommunications Act's one-year anniversary, the Department of Education is awarding a total of \$14.3 billion to three states -- Illinois, Mississippi, and New Mexico -- the very first of a total of \$200 million in Technology

Literacy Challenge grants. Communities will use these funds to equip classrooms with computers, link schools to the Internet, and train teachers in new information technologies."

"The Telecommunications Act of 1996 can help us in a major way by getting all schools and more classrooms on-line and helping the highest poverty schools receive the largest discount on connecting classrooms to the Internet," said U.S. Secretary of Education Richard W. Riley.

"The bipartisan recommendations by the Federal Communications Commission's Federal/State Joint Board are truly momentous. They will ensure that all schools and libraries have affordable access to advanced telecommunications, with deep discounts for schools in low-income and high-cost areas."

Riley noted that the recommendations would enable almost 70 percent of all schools to get at least a 50 percent discount on a wide range of telecommunications services, including Internet access and the connections to the classrooms.

While the number of schools and classrooms with access to the Internet continues to increase, Riley cautioned that our efforts ~~to improve~~ teaching and learning must extend to all schools and classrooms. The survey showed that only half of the schools serving high numbers of poor students were connected, while about three-fourths of the schools serving more affluent students had Internet access.

Riley said we are beginning to address this problem through the president's Technology Literacy Challenge Fund and other initiatives. Clinton has doubled his funding request -- \$500 million -- for education technology initiatives for fiscal 1998.

"It's also imperative that teachers and administrators be on the front line to help us excel in this information era," Riley said. In 1996, the survey showed that only 20 percent of teachers used advanced telecommunications for teaching.

The survey was sent to a nationally representative sample of more than 900 public elementary and secondary schools in fall 1996. Data were collected on the prevalence of Internet access, the types of Internet capabilities schools make available, use of advanced telecommunications by schools and teachers, and sources of support for advanced telecommunications in schools.

Of the 65 percent of public schools with Internet access:

- o Ninety percent had e-mail, 89 percent had World Wide Web access, and 57 percent could access news groups;
- o Twenty-five percent could connect to the Internet from five or more instructional rooms;
- o Among schools with World Wide Access, 94 percent made it available to teachers, 86 made it available to administrative staff, and 74 percent made it available to students;
- o Sixty-seven percent had access to resource location services (such as Archie, Gopher, Veronica, etc.).

The findings are reported in "Advanced Telecommunications in U.S. Public Elementary and Secondary Schools, Fall 1996," which is a follow-up to similar surveys conducted in 1994 and 1995.

Other findings from the survey include:

- o The number of schools with access to the Internet has increased by 15 percentage points for the second consecutive year;
- o **Eighty-seven** percent of the schools without access to the Internet have plans to **obtain** access by the year 2000, thus 95 percent of the nation's public schools expect to be connected by the turn of the century;
- o Teacher training in advanced telecommunications was mandated by the school or district or required by teacher certification agencies in 13 percent of the schools, while in about half of the schools it was left up to teachers to initiate participation;

- o Nearly three-fourths of schools used advanced telecommunications (including but not limited to the Internet) to access information; 67 percent used it for record keeping within schools or school districts; and
- o Twenty percent of teachers used advanced telecommunications for teaching, 16 percent for professional development, and 15 percent for curriculum development.

Single, printed copies of the report will be available in mid-March by calling 1 (800) 424-1616 or (202) 219-1513. Call the GPO Order Desk at (202) 512-1800 to order multiple copies.

Currently, single copies of the report are available by calling (202) 219-1677.

The report is accessible at the Internet address:

<http://www.ed.gov/NCES/pubs/97944.html>.

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THE PRIVATE SECTOR

Joan Vennoch

Technical glitch

Remember NetDay? With help from parents and more than 100 companies across the state, some 400 schools worked to connect to the Internet. Gov.

William F. Weld, then running for US Senate, even elbowed his way into one of the schools - the one with all the TV cameras.

The volunteers wired things up, as promised.

But the state has yet to keep its promise to pass along money from a \$30 million education technology bond bill needed to back up the effort.

Not a single cybercent has made its way to a public school, despite pleas from the Massachusetts congressional delegation and complaints from some in the business community who helped make NetDay a success.

In a letter dated Jan. 21, the Massachusetts delegation asked the governor to please, let the money go.

But partly because Charles Baker, the state secretary of administration and finance, forced every school system to reapply, the money is still being held hostage.

Weld finally did release a list of 25 cities and towns eligible for the first round of funding. State education officials now insist money will go out over the next few days.

"The symbol of this money not getting into the schools was disheartening to everybody," says Joyce Plotkin, who heads the Massachusetts Software Council, one of NetDay's driving forces. She hopes Weld will keep his latest promise about the money.

"The process has been slow and at times frustrating for local communities," agrees state Rep. Patrick Guerriero (R-Melrose), who co-sponsored the bond bill.

His community (and mine) didn't make the first round of funding. Naturally, the 25 that

did is a matter of some controversy.

Somehow, the Weld administration managed to exclude Boston, Springfield, Worcester and many of the state's poorer communities.

Thirteen of the 25 - including affluent suburbs like Brookline, Lexington, Acton and Hamilton - were singled out for a first crack at a portion of some \$3.5 million in federal money that's also available to Massachusetts.

Federal officials must still sign off on Massachusetts' application. So the Weld administration's announcement of where any federal money is going is definitely premature.

"One thing we absolutely do require is that the states consider and make part of their overall strategy, distribution to districts with the highest level of poverty and the greatest need for technology," says Rick Miller, press secretary to US Education Secretary Richard Riley.

When Boston Mayor Thomas M. Menino asked why his city didn't make the cut, Connie Louise, technology coordinator for the state Department of Education, told The Boston Globe: "Before we start anything, they're complaining?"

Yes, they're complaining. Because so far, it looks like another example of the contempt Weld and those around him regularly express for the have-nots, especially the urban poor.

To deflect criticism, the administration this week is sending out a letter to 76 more school systems, including Boston, saying they will qualify for future funding rounds.

Asked to explain the state's criteria for choosing fund recipients, Greg Nadeau, chief information technology officer for the state education department, says, "We don't think looking just at poverty is the only way to address the need for technology."

He says the 13 school systems the state is putting forward first for federal money were chosen because they already have excellent technology models in place and can be used as a resource for systems that are further behind.

Weld, meanwhile, wants to put our students in school uniforms. Why isn't he as eager to put them in front of computers?

Could our governor have something in common with the superintendent of the discredited Lawrence public schools - a penchant for style over substance?

Watch him to show it once again on April 19 - the second NetDay.

GOOD DEEDS, continued...

Reinhard is appealing a decision at the Fourth US Court of Appeals, which held that schools, not parents, can dictate which programs are appropriate. The US Supreme Court is expected to announce in the next few weeks whether it will take the case.

Whatever the outcome in the courts, Reinhard's son, also named John, says he would rather finish his senior year at the local community college than submit to the school's service requirement.

"I have no problem with community service," says John Reinhard Jr., a junior at Chapel Hill High School. "But if you force someone to do it, don't call it volunteering. I'm actually thinking of volunteering at an animal shelter, but I won't document it."

In Boston, Ms. Fuller, a junior at City on a Hill Charter School, has no problem with her 75-hour service requirement.

Already this year, Fuller has helped teachers at a local elementary school and passed out leaflets on voting rights. Her cur-

rent job, a two-week stint at the Boston Persistent Poverty Project, gives her a chance to see the laws of probability and statistics put into practice.

"We have charts that say, this is the amount of people in this neighborhood, this is the number of jobs there, and this is the likely poverty rate," she says from her high-rise office in downtown Boston. "It shocked me when I saw it, because I live in one of those neighborhoods."

"It's been a great experience," Fuller says. "If you do this, you can avoid getting to college wishing you'd spent more time learning about computers or something else. And it looks great on a resume."

THE CHRISTIAN SCIENCE MONITOR

Wednesday, February 19, 1997

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Parents Push For Libraries Free Of Internet Porn

By Scott Baldauf

Staff writer of The Christian Science Monitor

SOME kids don't know much about pornography until they find it on the Internet - at the public library.

The issue recently caused a stir in Boston, when officials at the Boston Public Library admitted they had no way of keeping children from stumbling onto X-rated sections of the Internet on library computers. Boston's Mayor Thomas Menino last week ordered the city to install software on library computers to filter out "adult-only" information. But some groups say parents will need to take steps of their own to make the World Wide Web safer for children.

"It's a powerful culture out there, and some kids are more vulnerable than others," says Karen Jo Gounaud, founder of the Family Friendly Libraries group in Springfield, Va. "At some point it's up to the individual to make choices, but it makes it harder for everyone if libraries are not cooperating with the communities they serve."

Some librarians argue that it is impossible to watch every child. Many, including officials in the American Library Association in Washington, say that restricting adult Web sites could be the first step toward a cyberspace book burning.

But even before the constitutional issues are resolved, parents in a growing number of cities, including Oklahoma City, Columbus, Ohio, and Orlando, Fla., are taking matters into their own hands.

The weapon of choice for many groups is software that blocks unwanted Web sites on home or office computers. Some computer programs keep a running list of news groups and Web sites that are deemed to have high levels of pornographic or violent content, racism, and even those that promote alcohol use and gambling. Others allow parents to specifically list which sites their children can use.

The software approach has its limits, however, and some children get around these obstacles by tapping into the library's computer from home, says Bob Anderson, founder of Oklahomans for Children and Families in Oklahoma City. But even in such cases, parents have recourse. If parents suspect the local library or another Web-provider is providing their children with cyberporn, Mr. Anderson says, they can "turn it over to law enforcement."

Last year, Anderson used this hard-nosed method to persuade the University of Oklahoma to dump adult material found on the campus Web provider. He showed the president pictures of bestiality and child pornography that had come from the campus computer, noted that they may be illegal images, and said he intended to tell the police, district attorney, and FBI.

"The next morning," Anderson recalls, "The president met with his lawyers at 8, met his computer people at 9, and by 10 a.m., they had dropped 100 adult news groups."

Parents bear the ultimate responsibility for their children's welfare, Gounaud admits, "and they should train their children to make unpopular choices. But I don't care how disciplined a child is. It's up to [society] not to unduly tempt that child."

WASHINGTON POST, Nov. 8, 1996 p. 11C

DISCOUNTS BACKED ON INTERNET COSTS; SCHOOLS,...

by Elizabeth Corcoran

Grade schools and public libraries would receive hefty discounts on the costs of Internet access, internal wiring and communications services such as video conferencing beginning next school year under a plan unanimously approved yesterday by a government advisory panel. As much as \$2.25 billion a year would fund the program, provided by the nation's communications companies.

In mid-October, during a campaign speech in Knoxville, Tenn., President Clinton said he supported giving grade schools and public libraries "free basic service to the Internet."

Instead, the plan, which officials predicted would receive formal federal approval, would provide discounts of 40 percent to 90 percent for all but about 3 percent of the nation's grade schools. The wealthiest ones would be eligible for smaller discounts.

Getting schools wired to the Internet has become a bipartisan objective for improving education. Advocates say the global computer network would give students access to learning and information now denied to them.

"While it's true that it's not completely free for all schools, the package covers more services than we were originally proposing," Vice President Gore said in a telephone interview yesterday.

"With the inclusion of inside wiring and other services . . . and with the extra money that they've put into the proposal -- in perpetuity -- we will definitely be able to reach our goal of connecting every school and library to the information superhighway by the year 2000," Gore added.

Not covered by the discounts would be computer hardware, curriculum software, teacher training and other support and maintenance expenses.

More....

INTERNET COSTS, continued...

While the plan calls for the money to come from telecommunications companies, the cost ultimately would be paid by consumers. "We've advocated [adding the cost] like a surcharge on customers' bills," said Frank Gumper, vice president of federal regulatory planning for regional phone company Nynex Corp. Such details have yet to be worked out, he added.

The proposal was orally approved yesterday by a special federal-state advisory board that met at the Federal Communications Commission. Three of the four commissioners of the FCC, which must vote on the plan by May 8, also are members of the board.

FCC Chairman Reed E. Hundt called final passage by the FCC "as predictable a result as you can get in this world."

The discounts would scale up, depending on the economic condition of the school or library and the local cost of telecommunications services. Private and nonprofit schools also would be eligible for the discounts, except for those with endowments greater than \$50 million, as would about 9,600 rural health care providers.

All told, the FCC estimates that about one-third of the nation's grade schools would be eligible for discounts of at least 80 percent.

Schools and libraries also would be encouraged to become "smart" consumers of electronic services by banding together with local governments to negotiate the lowest possible price for telecommunications services.

The funds to pay for the discounts would come from an expanded kitty that provides below-cost phone service to poor and rural areas. Local and long-distance companies support that fund. In the future, any company that provides interstate telecommunications services would have to contribute.

All those companies also would be eligible to bid on contracts to provide services to schools and libraries. "We're giving telecommunications companies the chance to create their own customers for the future," said Sen. John D. "Jay" Rockefeller IV (D-W.Va.).

Institutions already using network services would be able to apply their discounts to their charges as soon as the government signs off on the plan.

Regulators Advance Plan to Hook Schools to Internet

By JEANNINE AVERSA
Associated Press Writer

WASHINGTON (AP) - The nation's schools should get discounts of up to 90 percent of the cost of bringing the Internet computer network into classrooms, a panel of federal and state officials said Thursday.

The plan would provide all elementary and secondary schools - both public and private - with access to the global computer network at a cut rate.

A centerpiece of President Clinton's second-term educational goals, the proposal would cover 50 million students and teachers at 100,000 schools.

Besides discounts for the Internet service itself, schools also would be given discounts on the costs of hooking them up to telecommunications networks necessary to tap into the Internet and on the costs of wiring inside classrooms.

Discounts vary upon the wealth of the school and also would be available to libraries. They "will help our kids into the information age," said FCC Commissioner Rachelle Chong, a member of a federal-state joint board that developed the plan.

Other than for the most affluent schools, discounts would be in the range of 40 percent to 90 percent, depending upon wealth of school and whether it is located in a high-cost telecommunications area such as a rural community.

Wealth is defined by the number of students eligible for federally subsidized school lunches. Schools where less than 1 percent of students participate in the subsidized lunch program would get a 20 percent discount.

Vice President Al Gore hailed the proposal, saying the average discount under it would be 60 percent. One-third of schools, he added, would get at least an 80 percent discount and the poorest 15 percent of schools would get a 90 percent discount.

"The proposed discounts are substantial and will lead to significant savings for our nation's schools and libraries," said Education Secretary Richard Riley.

About half the nation's public schools were linked to the Internet in October 1995, up from 35 percent one year earlier, according to survey the Education Department released earlier this year. However, only 9 percent of individual classrooms had access.

Before becoming final, the plan must be approved by the Federal Communications Commission. Parts of the plan also may have to be approved by state telecommunications regulators.

The recommendation carries out a provision of a new telecommunications law enacted in February and is part of a larger proposal seeking to ensure that all Americans have access to some level of telecommunications service beyond basic local phone service.

The proposal falls short of Clinton administration recommendations to provide Internet access to the schools for free. There's little difference in cost between the two plans.

The administration's plan called for up to \$2.5 billion to be made available for free Internet access. The new proposal would limit the amount of money available to \$2.25 billion per year. The money would come out of an existing fund paid for by telephone companies to support universal telephone access.

The new telecommunications law directed the FCC to create the eight-member Federal-State Joint Board, including federal and state regulators and one consumer advocate, to develop recommendations to make the Internet more accessible to the nation's schools.

Cable's Gift to Schools

The cable television industry has pledged to provide nearly every school in the country with access to the Internet — the network of millions of computers around the world that offers on-line information. The offer will bring fabulous educational resources to schools too poor to provide an advanced Internet hookup on their own.

Some schools are already connected to the Internet over telephone lines. AT&T promised last year to help connect all schools by the year 2000. But even for schools connected by phone, the cable initiative provides an exciting dimension — speed. A graph, picture or video display that takes hours to display over telephone lines (eating up an entire class period) would take only seconds to send over cable. High-speed cable access would open up the classroom to new computer-based teaching tools. Indeed, once high-speed cable access is widespread, computer services will develop applications that are now technically infeasible.

Under the initiative, local cable companies will provide free of charge to every public and private school in their service area a cable modem that connects computers to cable lines in much the same way ordinary modems connect computers to telephone lines. The cable operators also promise to cover subscription charges to an on-line computer service. Some local cable operators also promise to pay for teacher training and curricular materials.

About 3,000 schools will be outfitted during the next 12 months — including schools in parts of Nassau and Suffolk Counties in New York and Bergen and Hudson Counties in New Jersey. Only the handful of elementary and secondary schools in regions with no cable operators will be left out of the program.

The industry expects that the initial hookup of about 95,000 elementary and secondary schools will cost about \$100 million. The cable industry hopes to reap financial advantage when students who become used to high-speed Internet access expect no less at home. Cable companies will no doubt develop residential packages that include Internet access, cable TV and, under the new telecommunications law, telephone service.

Some schools already offer students advanced science and other specialized courses over the Internet, taught by superstar teachers at faraway schools and universities. For these schools, high-speed cable access will greatly expand the information they can put before any enterprising student. An advisory council to President Clinton recommended last year connecting schools to the Internet, but it provided no proposal to raise the tens of billions the plan would cost. With Federal outlays on education expected to fall by 30 percent or more over the next few years, the cable industry has provided an answer — at 300 times the speed.

Glitches won't stop kids from logging on to the future
By Bruce Cheadle

OTTAWA (CP) - Marcus Shea figures he's been communing with computers for about half his 11 years.

So he wasn't going to let a few technical glitches crash his belief in the future of high technology.

Shea and some Grade 6 classmates were part of an interactive video teleconference Tuesday with Aline Chretien and Hillary Rodham Clinton, beamed to Ottawa by satellite from an elementary school in Washington, D.C.

Never mind that the sound was muddy (or non-existent) and mismatched by a full second with the video images in B-movie overdub fashion.

And never mind that the eight computer monitors and state-of-the-art work stations in the school in a rundown section of Washington were taken out once the luminaries left, the Globe and Mail reported today.

All the school will be left with is a \$5,000 satellite dish donated by Hughes Network System.

"We need to get them at least one work station so they can take advantage of all this technology that we are showing them," Fritz Stolzenbach, a Hughes official, told the Globe.

But the children on both sides of the border were still charmed by the events.

"This is pretty new technology," Shea observed from Ottawa's St. Elizabeth School.

"I think in the future we'll be getting a lot more out of this. In the future we'll be able to use it whenever we want."

And without the presence of curious middle-aged voyeurs.

A full contingent of national news media, educators and government bureaucrats turned out to witness Tuesday's spectacle: the 1990's equivalent of window-shoppers watching, spellbound, the first shadowy figures on a 1952 RCA television set.

Today's generation of school kids is becoming as familiar with the Internet as baby boomers are with TVs and telephones.

"It is just a tool," said Dalia Naujokaitis, a pioneer in computer teaching at St. Elizabeth since 1981.

"We have to remember that a lot of adults are still technophobes in one way or another. But we have the Nintendo generation here. For them it's nothing."

Tuesday's presentation was a mix of politics, educational advancement and new technology:

- Chretien and Clinton, whose husbands were meeting at the White House, took part to highlight their respective governments' commitment to computer training in schools.

- SchoolNet, a school-friendly Internet hybrid, showed its colors. An alliance of public and private sector partners, SchoolNet hopes to be in all 16,500 Canadian schools and 3,400 public libraries by 1998.

- The teleconference - minus the errant audio feed - arrived via Canada's first small-dish, high-speed digital broadcast service. DirecPC will allow students with SchoolNet to tune in CBC Newsworld.

Yet among the metres of black cable, 18 computer terminals, headsets, sound board and numerous TV cameras in St. Elizabeth library Tuesday, the place maintained its 20th century ambience.

A dusty fish tank, a microscope, scales and a battered box marked Rhythm Instruments vied for space on the shelves with computer discs.

Shea, his classmates and their cyber-peers at Burrville Elementary School in Washington recently completed a project asking each to describe the school of the future.

Shea's vision included wireless Internet access, routine video conferencing and virtual reality.

"It's going to become part and parcel of the way things are done," said Naujokaitis.

In the meantime the students will have to make do with the dozen or so outdated computers that they have scattered throughout the building and the one that has Internet access.

"I need at least 30 computers," said Burrville principal Gwendolyn Baccus. More than that "if the younger children are to have access."

"When this is all gone we will be back to the drawing board, back to filling out forms and asking for donations," said math teacher Jacqueline Goodlow.

Technology is closing Net gaps in child safety

By Leslie Miller
USA TODAY

When the Communications Decency Act (CDA) was introduced in February 1995, parents who wanted to restrict children's access to adult Internet sites had few options.

But the Net community has moved ahead rapidly in the past two years to demonstrate that when technology creates knotty problems, technological solutions are possible.

Now there are organizations that evaluate and rate Web sites and companies whose software selectively blocks them based on parents' concerns. On-line services such as America Online offer easy-to-use "parental controls," and many Internet access providers are offering "filtered" accounts for kids. The software is catching on with schools, libraries, even offices where bosses don't want employees surfing on company time.

"Parents, teachers and other people who were initially very skeptical that this kind of technology would ever provide an alternative to the CDA are now very convinced it can," says Jay Friedland of SurfWatch, which made a big splash in May 1995 when it announced its product could block 1,100 sexually explicit sites.

SurfWatch was soon followed by a raft of competitors with reassuring names like Net

Nanny and CYBERSitter.

"I think the last two years have shown the industry is capable of responding with technology solutions that are much more effective and flexible and less restrictive than content regulations," says Jonah Seiger of the Center for Democracy and Technology. He notes software can block overseas porn sites, which U.S. laws can't touch.

Throughout the much-publicized CDA debate, the technology has continued to evolve, with companies trying to one-up each other by adding features and ease of use.

"You don't even know it's there until you try to access

something you shouldn't," says Sydney Rubin, a spokeswoman for Microsystems Software, which has been aggressively marketing its product, Cyber

Patrol. The program not only blocks access to Web sites, it prevents kids from giving strangers information such as addresses and phone numbers.

SurfWatch now blocks three additional categories besides sexually explicit materials: violence and hate crimes; drugs, alcohol and tobacco; and on-line gambling sites. Parents can add to or delete sites from the company's list.

But they aren't the only ones using the technology. SurfWatch, whose original market was schools, now has an estimated 380,000 users, including 10,000 school districts. About 3.4 million copies have been shipped with Microsoft's Internet Explorer Web browser.

The Boston Public Library is one of 83 libraries now using Cyber Patrol, Rubin says; other cities using it include Austin,

Texas, and Pittsburgh.

Many companies are installing blocking programs on the server level, both as an added feature for Internet customers (NetCom, Earthlink, WebTV) and as a way to regulate what employees do on company time (Lockheed-Martin).

"It increases the security dramatically," Friedland says. It also means parents don't have to buy and install pricey software (\$25-\$55) on their own PCs or worry that kids might disable the programs.

But not everyone is convinced software is the answer.

"Even if those programs were to become very intelligent at blocking sites, they're never going to be 100%," says Cathy Cleaver of the Family Research Council, which supports the CDA. "Technology never supplants the need for

criminal laws. If there is no law, you give up your right to prosecute the worst offenders."

Some software is useful, but "why must it be either laws or devices? Our laws tell us what we accept as a society and what we find reprehensible. For there to be no law about giving sexual materials to kids on line sends a message."

Many new developments in blocking and content filtering are on the horizon.

Dozens in the industry have agreed to make their products compatible with the new industry-wide technical specifica-

tions known as PICS (Platform for Internet Content Selection). PICS enables computers to "read" digital labels containing content ratings provided by independent groups and to block material the user doesn't want.

Among groups that have created rating systems so far are the Recreational Software Advisory Council (which rates computer games and has rated 19,000 Web sites), the parents group SafeSurf and Net Shepherd, a Canadian company that just finished rating 300,000 sites for maturity and quality.

But PICS makes it possible for any group, from the PTA to a religious organization, to devise its own unique systems based on its own values.

While nobody has done this so far, some groups are considering it. ToraNet, a Jerusalem-based Internet company, has contacted PICS developers to inquire about creating a system that would block sites not suitable for Orthodox Jews.

"These are people who don't have televisions in their houses because they're offended by what's on," says Paul Resnick, chairman of the Web Consortium's PICS working group.

Microsoft has built a PICS-compatible parental control panel into its latest Web browser (Internet Explorer 3.0), and Netscape expects to include such a feature in the next year.

Testing cont.

In 1995, Utah kicked off its new elementary math exam, and last year did so with its elementary science test. Other subject tests will follow, such as the field test of elementary language arts in 1999.

The Maryland state school board last month moved into new territory by creating tough new end-of-course tests for high school students in English, math, science, and social studies.

For several years, the state has given challenging assessments in grades 3, 5, and 8 that were created in conjunction with state standards.

The high school tests, which would begin in 1999, would provide individual student scores, unlike those in the lower grades. They would replace the state's low-level competency tests that high school students now must take to graduate.

Still to be decided is whether a student's performance on the tests would be linked to the award of a high school diploma, said Mr. Cross, who is also the president of the Maryland state board.

Concerns from parents and others about the potential high-stakes nature of the new high school tests prompted state schools Superintendent Nancy S. Grasmick last month to vow to convene an advisory panel of community members, educators, and students.

Education Week, March 19, 1997

Discount 'E-Rate' for Schools and Libraries Nearly Lost in Debate

By Andrew Trotter

Washington

Like a small car on a busy interstate, the proposed discounts on telecommunications services for the nation's schools and libraries seem in danger of being delayed or even sideswiped.

As powerful companies vie for commercial advantage, the vulnerable position of schools and libraries became clear at a hearing here last week before the Senate Commerce, Science, and Transportation Committee.

The committee's chairman, Sen. John McCain, R-Ariz., called the hearing to review the Federal Communications Commission's progress in writing rules for last year's telecommunications law.

At issue are the "universal service" portions of the law, which foster telephone service for rural and high-cost areas. The FCC must complete the rules on those provisions by May 8. The new law expanded traditional universal service to include schools and libraries and access to advanced telecommunications.

Last November, an influential FCC advisory panel recommended regulations that would give schools and libraries discounts of between 20 percent and 90 percent—dubbed the "E-rate"—for such services. The exact level would be based on need.

The proposal would require telephone companies to pay as much as \$2.25 billion annually into a fund for reimbursements to companies that provided the services. Other universal-service rules would help ensure affordable telecommunications services for people and businesses in remote and high-cost areas.

Packed Hearing

Throughout most of the March 12

hearing, there was a standing-room-only audience, and some attendees stood in line for more than 10 hours to get in.

Billions of dollars are at stake. Complex details, such as exactly which types of companies would pay into the various funds, what services would be eligible for reimbursement, and how the reimbursement amounts would be determined, will have far-reaching implications.

The senators urged Reed E. Hundt, the FCC chairman, to produce sensible regulations that open the highly subsidized enclaves of the telephone industry to market competition. Mr. Hundt complained of fierce lobbying by the industry, whose estimate of the yearly cost of universal service has soared to \$24 billion.

Later, four telephone executives clashed with one another as they sought to frame the issues of universal service to favor their different segments of the rapidly shifting industry.

Sparks flew as two representatives from local phone companies defended the access fees they charge to long-distance companies for using the switches and lines that complete calls to local businesses and residents.

Their counterparts from long-distance companies replied that the access fees are exorbitant and that slashing them would provide the wherewithal to pay for universal service.

Conflicting Interests

All the speakers came with their own sets of numbers and used them to paint drastic scenarios—such as higher telephone bills and restricted service—of what would happen if their own particular needs weren't met.

Although none said they opposed affordable services for schools, each of the corporate representatives advocated positions that would shift more of the cost to their competitors within the phone industry as well as to companies providing Internet services and software.

When the corporate fireworks ended, most of the audience rose to go. The final speaker, Anthony Wong, a school board member from Cecil County, Md., was almost overlooked before Sen. Conrad Burns, R-Mont., called for order.

Mr. Wong spoke on behalf of a coalition of more than 30 education and library organizations that supports the most comprehensive discounts possible for schools and libraries.

He told the hearing that his district cannot not afford two-way distance-learning services because of the \$13,000-per-school annual cost. The FCC advisory board's plan would save the 14,900-student district \$1 million over five years, he said.

Mr. Wong, who is also an assistant professor of computers and information at Cecil Community College, said he spends too much time teaching his students computer skills they should have learned in high school.

Sen. Jay Rockefeller, D-W. Va., one of the two senators who remained at the hearing, commented wryly on the exodus that preceded Mr. Wong's presentation.

"It's indicative of what goes on in Congress that you end up last," he told Mr. Wong. "There went a cascade of about 200 highly paid lobbyists who chat their way out and go on to their next triumph."

MRS. CLINTON, continued...

Uganda has one of the highest rates of HIV infection in the world. About 1.5 million of its 14 million citizens carry the virus.

Dr. Crispus Kiyonga, Uganda's minister of health, said about 500,000 have died of AIDS and roughly 1 million children were orphaned because of it.

But, Kiyonga said, the rate of HIV infection is dropping, especially among young women, due to a massive AIDS education program. He said he would like for Ugandans to be able to participate in testing of new AIDS vaccines in hopes of helping more infected people live longer.

"Uganda will not be left behind," Kiyonga said.

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Business, government join to help teaching by Internet

WASHINGTON (AP) - The U.S. government is joining with the telephone company MCI Inc. in a project using the Internet to help teach pupils from kindergarten through high school.

Education Secretary Richard Riley and MCI's president, Timothy F. Price, said Thursday the plan is to provide a one-stop World Wide Web site for teaching material.

MCI, the nation's second-largest phone company soon to become part of British Telecom, will work with the federal National Endowment for the Humanities, the professional organization the American Association for the Advancement of Science and the National Council on Economic Education, which is funded by corporations.

"Partnerships such as these are critical to bridge the learning gap that now exists between having the technology available in our schools and actually using it as a learning tool," Riley said.

The new Web site is to be available Sept. 1.

"These programs will enable teachers and parents to use the Internet to build a complete curriculum, instead of having to lose time surfing randomly to find information," MCI's Price said.

USA TODAY FRIDAY MARCH 28, 1997

INTERNET EDUCATION: The Education Department and MCI Communications Corp. unveiled a plan to provide a one-stop World Wide Web site to help teach students from kindergarten through high school. The goal is to give teachers and students easy access to material without wasting time surfing the Internet. Education Secretary Richard Riley said. The Web site is to be available Sept. 1.

...and Internet access for all

The 1996 Telecom Reform Act has at least one bright spot: a little-known provision that promises to bring high technology to our schools and libraries.

By Leslie Weiss

The Telecommunications Act of 1996 generated a storm of controversy. The indecency provisions of the new law hit the courts and grabbed headlines across the nation. Web pages went black to mourn the dark day for free speech. And Americans quickly saw the effect of deregulation in a series of megamedia mergers that led to dramatic new concentrations of media ownership.

But hidden behind the bad news was a glimmer of light: a little-publicized section (SEC. 254) of the act that called for telecommunications carriers to provide discounted services to schools and public libraries. This "universal service" concept was created in the Communications Act of 1934 to ensure access for all Americans to the then-emerging communication technology -- the telephone. Since then, the industry has been required to subsidize phone service for poor Americans and for customers in rural areas where the costs of phone service are high. And now the 1996 Telecom Act has broadened the definition of "universal service" to include Internet technologies.

In November 1996, a joint board of the Federal Communications Commission and state public utilities officials unanimously recommended that a whopping \$2.25 billion a year in high-tech discounts be made available to elementary schools, secondary schools, and libraries by the start of the 1997-98 school year. Discounts would range from 20 to 90 percent, based on need, and would cover Internet access, internal wiring among classrooms, and telecommunications services, including monthly phone bills.

Three of the FCC's four commissioners served on the joint board, making the proposal a sure thing when it goes before the full commission later this spring. FCC Chairman Reed Hundt has called it "a

major step forward in our quest to bring the benefits of the Information Age to every person in the country." While half the nation's K-12 schools are online, only 14 percent of their classrooms currently have Internet access.

Kevin Taglang, a policy analyst for the Benton Foundation, a nonprofit that promotes the public interest in communications policy, calls the discount provision of the Telecom Act "one of the brightest things that's happened in Washington in a long time." But he notes that the discounts will go only so far -- they will not cover the purchase of personal computers and software or ongoing expenses for systems maintenance and teacher training.

That's just fine, though, for financially strapped schools that need services far more basic than Internet access. "It's the big thing now to talk about the wonders of the Internet, but the fact of the matter is we're in a district where we're concerned with teaching children to read and write," says Eugene Stovall, network coordinator for the Oakland Unified School District. He adds that the district's goal is to have seven computers in each classroom, but that basic phone service is the priority.

For the most part, the telecommunications industry appears to agree with the intent of the schools-and-libraries discount. "In the long run, this is what the country needs," says Frank Gumper, vice president of federal regulatory planning for NYNEX Corp.

It's in the details that industry leaders disagree -- like the \$2.25 billion in discounts they'd have to provide each year. Gumper says \$1.5 billion a year is sufficient for wiring, access, and telecom services. Other issues of contention include whether the costs of wiring inside classrooms should be discounted, or if it is outside the FCC's jurisdiction to regulate internal wiring, as the Pacific Telesis Group argues.

Then there's the issue of who pays for the discounts. The FCC joint board wants telecommunications carriers to pay into a fund, which would reimburse companies that provide discounts. But the rule requires telecommunications carriers to pay into the fund based on a percentage of their interstate and intrastate revenues, and federal rules affecting revenues regulated by state laws are bound to cause jurisdictional tiffs. In addition, while both telecom carriers and Internet service providers (ISPs) would have to discount their services, and would both get cash back from the fund, ISPs wouldn't be required to pay into it. Gumper charges, leaving carriers like NYNEX to subsidize ISPs like CompuServ.

(Whether the NYNEXes of America get to pass any of these discounts off as rate hikes on consumers' phone bills is yet to be determined. But even if it does happen, says Mark Cooper, research director for the Consumer Federation of America, it won't amount to more than 90 cents on the average residential phone bill. "Do I think it's good public policy? Absolutely," he says.)

This checklist of issues doesn't approach the level of controversy generated by the indecency provisions of the Telecom Act. But some of it is likely to wind up in court after the FCC's May decision, making it questionable that discounts will be available to schools in the fall. Insiders insist, though, that the telecommunications industry will furnish schools with most of what the FCC asks.

Michelle Richards, a lobbyist for the National School Boards Association, agrees: "I think they've sort of seen the writing on the wall." *Leslie Weiss is Managing Editor of Earth Island Journal.*

ED FOCUSES TECHNOLOGY GRANTS ON TEACHERS, CONTENT

Applicants for the Education Department's Technology Innovation Challenge Grants this year should concentrate on showing teachers how to use computers and providing software for the classroom.

Under the program, ED awards grants to schools working with higher education institutions, businesses, libraries, museums and community organizations to use computers and other technology to improve student achievement.

Projects should focus on developing "innovative demonstrations of the use of technology for school reform," said Tom Carroll, an ED program officer.

The solicitation for the highly competitive program appeared in Friday's Federal Register. ED will spend \$18 million a year for five years for 20 new awards. Applications are due May 30.

While devising ways to use technology to improve student achievement and promote school reform, grantseekers should think about improving teacher knowledge of

technology and education technology content.

Stressing those components could make a proposal rise to the top of the pile. Last year, ED received 586 applications for the 24 grants it made.

Other factors that could move applications to the forefront include addressing the learning technology needs of areas with a high number or percentage of disadvantaged students or the greatest need for education technology.

The notice cautions against creating a society of technology haves and have-nots. ED may consider the extent to which applications respond to high-need areas in the final selection process.

Eligible grant activities include:

- * Developing, adapting or expanding existing and new applications of technology to support school reform.

- * Funding projects of sufficient size and scope to improve student learning and professional development and provide administrative support.

- * Acquiring connectivity links, resources and services, including hardware and software for teachers, students, and library personnel.

- * Providing ongoing professional development in the integration of educational technologies into school curriculum and long-term planning for implementing education technologies.

- * Acquiring connectivity with wide area networks to access information in schools and public libraries; and *
- Providing educational services for adults and families.

For more information, see the March 28 Federal Register, or contact Technology Innovation Challenge Grants, Office of Educational Research and Improvement, Education Department, 555 New Jersey Ave. NW, Room 606D, Washington, D.C. 20208-5544, (202)208-3882; e-mail ITO_STAFF1@ed.gov; Internet, www.ed.gov/technology. The CFDA number is 84.303A. —Brenda Cordwell, Pam Moore■

Trip to Amazon begins in classroom

Secretary of education urges use of the Internet

By Linda B. Blackford
STAFF WRITER

They're already a well-traveled crew, U.S. Education Secretary Richard Riley, Sen. Jay Rockefeller and a host of other VIPs traveled down the Amazon Monday with computer students at John Adams Junior High School.

"You've got an excellent teacher here," Riley said of computer science teacher Robert Frostic, who helped create the Internet connection to study lezydids in the Amazon rain forest. "I think all of us need to stop and think about what makes a good school."

Part of that, Riley and Rockefeller stressed, is access to technology. Sixty-five percent of the nation's schools have an Internet hookup, but only 14 percent of classrooms have access. John Adams has three computer labs, one of which was funded by parent donations and grants. But poorer schools, both urban and rural,

have lagged behind the technology craze. At one time, Riley said, people would be shocked if schools didn't have enough textbooks to teach Shakespeare.

"This is just as real now as that was back when I was going to school," he said. "You are a national leader in technology, but we have a long way to go."

Telecommunications deregulation may help technology access, Rockefeller said, thanks to an amendment cosponsored by him and Sen.

Olympia Snowe, R-Maine.

The amendment puts aside \$2.25 billion a year to provide discounted Internet access, hookup and wiring for schools and libraries. The bill will be considered in May.

"How will Welch, W.Va., make this on any other system?" Rockefeller asked. "Urban areas will have first-rate computer-literate students. Where will Calhoun County be?"

All of West Virginia's elementary schools have computers and Gov. Cecil Underwood announced an \$8.5 million program to start adding them to secondary schools. But many rural areas still don't have Internet access because telephone companies may not provide service there.

"We'll have Beverly Hills High School on one side and a rural

school on the other," Rockefeller said. "That we can't afford."

Monday's tour started at Martinsburg's North Middle School. Riley and Rockefeller are old friends; they served as governors of South Carolina and West Virginia at the same time.

"We were fighting for education back before it was cool," Riley said.

He also pitched President Bill Clinton's new call for national education standards, which states can choose to adopt.

"Standards are what a child should know in a certain grade on a certain subject," Riley said. "Any business person will tell you, you have to define what you will do to accomplish it."

States could choose to test their students on a national test in the fourth and eighth grades.

National standards and recent school-to-work efforts have been criticized for eroding local school control.

"That blows my mind," Riley re-

sponded. "What we have in school-to-work is the same high standards for everyone, instead of one for rich kids and one for poor kids."

Chris Tansy, one of the seventh-grade computer experts, agreed that schools need more computers and teacher training.

"I think a lot of teachers don't know how to use the Internet," he said. "We need more computers because we use them for lots of other things, too, like writing papers."

A National School of Excellence, John Adams gets plenty of visitors, but the U.S. Education Secretary's first visit caused more hubbub than usual. The entourage included Gov. Cecil Underwood, state schools Superintendent Hank Marockie, Kanawha Superintendent Jores Marple and several members of the state school board.

"So that's why they've been cleaning up and fixing things all month," one student said as the shiny black cars pulled away.

DETROIT FREE PRESS APR 01 1997

B1

Archer pushes plan for schools

B1/H

BY JENNIFER JUAREZ ROBLES
AND PEGGY WALSH-SARNECKI
Free Press Education Writers

Detroit Mayor Dennis Archer — a former schoolteacher — came out fighting at a news conference Monday for his city-state reform plan for the Detroit Public Schools.

But the Detroit Board of Education remains bitterly divided over whether it should accept his help.

"We encourage partnerships from everyone," Board President Irma Clark said Monday. "Why should we discriminate against the mayor?"

But Vice President Kwame Kenyatta said Monday that he was "more hardened in my position" to oppose Archer's initiative because he believes it will undercut the school board's legal authority to run the district.

Archer offered last week to create a city-state school partnership that he and Gov. John Engler would lead to ensure that graduates from Detroit high schools are immediately employable or can advance to college without remedial education.

A resolution adopting the partnership plan with some modifications was tabled 6-5 by the board last Tuesday.

At an afternoon news conference Archer said the board's opposition "frankly stems from a lack of desire to be at the table with Gov. Engler."

Archer said Engler and the state government "hold the purse strings" and need to be part of the partnership's recommendations, which the board could accept or reject.

The mayor adamantly denied Monday that the partnership plan is a takeover.

"There's no legislation whatsoever

that causes a takeover," Archer said. "If there's no legislation, no authority, how can you take over something?"

He added: "Why would I want to be a party to any takeover?"

Clark said the plan could be voted on again at the regular board meeting on April 8.

"Some people played on the paranoia of some board members by bringing in the takeover issue. That's ludicrous. I don't know why people are getting so territorial," Clark said. "It takes a village and we want to include as many people from that village as we can."

Archer urged the board to reconsider the partnership plan in a four-page letter that was hand-delivered to each board member Friday night.

Under Archer's plan, which has been in the making for the past four months, a leadership group of city, state and local officials would meet frequently to recommend changes.

Beyond describing the plan's mission and goals and listing the likely members of the leadership or stakeholder group, Archer hasn't offered many specifics.

Can the Net Hurt Schools?

Author Michael Crichton and FCC Chairman Reed Hundt spar at PC Forum.

Midway through this week's PC Forum conference in Tucson, Arizona, where the roster of a thousand attendees includes Netscape CEO Jim Barksdale, Jurassic Park author Michael Crichton, and Chairman of the FCC Reed Hundt, technology's role in the educational system has become a heated issue.

Crichton, the after-dinner speaker at the conference's first session, opened up a debate with a foreboding set of predictions about how Internet access for school-age children could undermine—not help—education in America. The morning after Crichton delivered his warning, FCC Chairman Hundt (a former attorney and school teacher) argued vehemently against Crichton's assertions, firing off a hailstorm of data contradicting Crichton.

"I thought Michael Crichton's speech last night was to education as Jurassic Park is to cloning," said Hundt, in a guarded confrontational style that typified his rebuffs of Crichton's arguments. "The speech was completely false, but highly entertaining."

Mayan Civilization: Glitz vs. Facts

During his speech, Crichton showed a video clip from Microsoft that depicted an elementary-school student delivering a multimedia research report on Mayan and Incan civilizations. The child had built the report's elements from the Internet. After the clip, Crichton surgically took apart the facts in the child's report, characterizing the report as heavy on glitz and dead wrong on facts. "The worst part about this," Crichton said, "isn't just that the teacher—impressed that this showy report was built with the aid of the Internet—praised it, but that nobody at Microsoft knew that the facts were wrong."

Crichton asserted that those who support bringing the Internet to

classrooms aren't thinking about issues of implementation, training, and structured curriculum. He questioned how a teacher could possibly deconstruct and evaluate information gathered from not-so-reliable Web-based data and obscured by multimedia glitz. He argued that parents are the key to improving the educational system, and that the networked classroom may create distance between students and teachers. "There is a lot of data supporting the idea that technology does not make a difference in classrooms," Crichton said.

"It is true that we need to evaluate what the Internet actually is, whether it's more analogous to a library or cable TV," said FCC Chairman Hundt in his morning address. Hundt pointed to the fact that those issues are at the core of the Supreme Court's current evaluation of the Communications Decency Act, which aims to restrict access by minors to "indecent" information on the Internet. "However, is there any parent in this audience who really wants to keep his or her kids from computers and communication technology?" Hundt asked.

Internet Access: Rural vs. Affluent

Hundt followed this question up with data from the FCC. He said that by the year 2000, 60 percent of new jobs will require computers and networking skills, and that jobs requiring such skills will command 10 to 15 percent pay premiums. He also said that only 14 percent of U.S. classrooms have Internet connections, with those connections occurring mostly in affluent school systems. According to Hundt, only 4 percent of rural, low-income households have Internet access. "We do need to do a better job of training our teachers, though," Hundt conceded, noting that 80 percent of teachers do not use telecommunications technology in the

classroom.

Hundt related a story about a meeting he had with Microsoft CEO Bill Gates concerning Internet-enabling U.S. classrooms. "Gates pointed out that immigration policy was a huge policy issue for him," claimed Hundt. "Gates needs to hire people to work at Microsoft, and he says that our schools aren't providing the people with the skills."

Controlling Funds:

Government vs. Schools

In a question-and-answer period after Hundt's talk, conference official Esther Dyson and others questioned Hundt about FCC proposals for Internet-enabling classrooms. Hundt is currently backing a bill that would require a \$4.25 billion fund to be gathered from surcharges on telecommunications companies and charges to federal funding for education.

"Why not just give those billions to schools directly to implement technology, rather than having government oversee the implementation, which would create bureaucracy?" asked Dyson.

"In a word, no," replied Hundt, who gave no further direct response to the question, but commented that federal funds for education are intended simply to seed new ideas in classrooms, not rule implementation.

During the Q&A, participating audience members mostly supported the idea of Internet-enabling classrooms, but several of them voiced concerns about whether money was enough. The audience members called for training teachers in telecommunications skills, and the need for training emerged as the only issue upon which Crichton, Hundt and the audience shared common opinions.—Bill Howard and Sebastian Rupley

Computers and Cooperation

In an each-one-teach-others approach to increasing computer literacy in schools, an impressive public-private partnership is awarding grants to 25 computer learning centers to train Los Angeles County teachers and parents.

Many teachers don't know how to get on the Internet or use a database. They need training and access to technology to teach their students and even to keep up with computer-savvy pupils. The learning centers are the latest effort of the ambitious 2-year-old Technology for Learning initiative of the Los Angeles County Office of Education, which is funded by corporations, foundations and individuals. The collaboration's goals include providing thousands of teachers with computer classes and educational software.

At the computer centers, each newly trained teacher will be expected to train 20 other teachers. Some parents also will benefit.

The collaboration intends to train, directly and indirectly, 60,000 teachers, help ensure the wiring of 50,000 classrooms and help reduce the current dismal 15-to-1 student-to-computer

ratio to 4 to 1 in the county's 81 school districts, including the giant Los Angeles Unified, by the year 2000.

Major funding and support are provided by the AT&T Foundation; Jan Davidson of Davidson and Associates Inc., a computer software company; Microsoft Corp.; ETC, a subsidiary of the cable company w/tci; the Riordan Foundation; the Los Angeles Times and the Times Mirror Co.

The first 10 centers to receive grants were announced Wednesday: Adtech's Futures Academy in Redondo Beach; the Baldwin Park branch library; Break Away Technologies in the Crenshaw district; Parent University in Downey; Partners in Technology Training Center in the Antelope Valley; Puente Learning Center in Boyle Heights; Sulphur Springs District Training Center in Canyon Country, and three school-based centers in Alhambra, Pomona and San Pedro. An additional 15 will be named later this year.

In the end, many more of the county's 1.5 million public school students will become computer literate, an indispensable knowledge.

THE CHRISTIAN SCIENCE MONITOR March 31, 1997

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Thinking Buddies

TRUE education, in a famous 19th-century image, is a simple as a student on one end of a log and a teacher on the other. The line goes back to a student who became a US president, James Garfield, and his celebrated teacher, Mark Hopkins. It comes to mind because we want to get the amiably erudite governor of Massachusetts on one end of a log reaching to all the young people who think it's cool not to be caught learning in a dumbed-down 20th century.

The talk in Boston is that Gov. Bill Weld, state Senate President Thomas Birmingham, and House Speaker Thomas Finneran positively love learning and have fun challenging one another's intellect. It's even part of their weekly meetings as governmental leaders. One throws down the gauntlet of an uncommon word—a recent example was "struthian" (you could look it up)—and the two others have to use it in a speech or interview within 24 hours.

We think of a friend who spent her formative years in Britain. She didn't sulk when someone in the press used

a word unfamiliar to her, she resorted in looking it up and being the person

When people at the top of their profession do this, we yearn for them not to keep it all within their usual circles. We know Mr. Weld is sport enough to make a point by diving fully clothed into the Charles River. Couldn't he and his thinking buddies take their delight in using their minds to schools that need a boost? Education-shy children might be kindled by the example of people in the public eye relishing the exercise of wit and the increase of knowledge. Or pupils might be invited to the State House to see the intellectual action on the spot.

With the best will in the world, political leaders can do only so much. Other grownups could try a little self-scrutiny to see if their example to the young is enjoyment of learning or belittling of it, rejecting it as elitism or embracing it as a natural thing for all.

Struthian: variant of struthious, meaning ostrichlike, characteristic of those who don't take their heads out of the sand to see how many other people learn more every day.



FOR RELEASE
April 3, 1997

Contact: Jim Bradshaw
(202) 401-2310

**STATEMENT BY SECRETARY OF EDUCATION RICHARD W. RILEY
On the establishment of the World Wide Web Accessibility Project**

America's rush to the Information Superhighway risks leaving behind a crucial element of our population -- our nation's 49 million persons with disabilities. The Internet has fast become one of the great inventions of our lifetimes. Yet for some citizens, this dazzling medium may offer about as much usefulness as the Pony Express.

Many Web pages cannot be accessed by people who are blind or have limited vision. Many home pages incorporate graphically-based technology that limits the accessibility of individuals with disabilities. Audio clips are of little use to those who are deaf or hearing impaired.

To address these and other concerns, we are pleased to join the National Science Foundation in contributing up to \$800,000 for the new World Wide Web Consortium's Web Accessibility Initiative. This effort will guide the development of industry-sponsored specifications to make the Internet accessible to all. Exciting possibilities like descriptive video, video captioning and innovative input devices will be explored. The department welcomes the opportunity through our National Institute on Disability and Rehabilitation Research and the Office of Special Education Programs to build on its long-term support of rehabilitation engineering and accessibility.

Learning online must not become a new fault line in American education, dividing the haves and have-nots. The Internet is the blackboard of the future. This also applies to the increasing role of the Internet in the workplace and as a means of regular communication. All persons -- disabled and non-disabled -- deserve access to information that promotes excellence in education, work and social understanding.

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How one NY school district hopped on-line

Technoguru shepherds grants, donations to introduce students to computers, Web

BY BRUCE KELLY ^{PA}

One recent morning, third-graders in Chinatown's Public School 20 were learning about fonts in computer class. Sumiya Rahman, her name in green on the glowing blue background of a computer screen, got up, half-skipped two computers to her left, draped an arm over a friend's shoulder and laughed.

Standing in the doorway watching Sumiya, Judith Zornberg pointed out that computers help achieve one of the fundamental objectives of education: getting students to enjoy learning.

Mrs. Zornberg should know. She's director of technology grants for Community School District 1—from Chinatown and the Lower East Side up to the East Village. With advocates for technology in city schools sprouting up as quickly as new Web sites, technogurus like

The linchpin of the district's efforts is a \$6.1 million federal matching grant it won last year

Mrs. Zornberg are becoming more important to individual school districts.

In his State of the City address this year, Mayor Giuliani promised the city would buy 40,000 personal computers for its approximately 1,100 schools. The infusion, if it occurs, would bring the city in line with the national average of one computer per 10 students.

District 1 ahead of the game

But it's educators like Mrs. Zornberg who will decide where to put those computers and how to use them. District 1, which has 9,500 students and began plugging into the Internet with state-of-the-art T-1 lines in February, has one of the most forward-looking technology plans in the city.

The linchpin of the district's efforts is a \$6.1 million federal matching grant it won last year for a special project on immigration. To be eligible, the district needed to raise \$18.3 million; in fact, it's raised more than twice that amount from companies such as Nynex, IBM Corp. and Scholastic Inc. By the year 2001, \$48 million worth of high-tech wiring, teacher training and curriculum development will be pumped into the district. This month, teachers from the district are taking part in a training program conducted by Scholastic.

Mrs. Zornberg, a 54-year-old mother of five, was hired by the district in 1995 to obtain and direct

such projects for revenue-strapped schools. Computers are used in District 1 in a variety of ways, from reinforcing vocabulary skills in English as a Second Language classes to researching science and social studies reports. Ironically, Mrs. Zornberg is reminded of the hands-on learning that was the norm when she started her teaching career in Red Hook in 1963.

"If listening to the teacher worked 100% of the time, kids would be doing a lot better than they are," she says.

The 18 schools in District 1, five of which still are heated with expensive and dirty coal-burning boilers, combine funds from several different sources to meet the costs of keeping technology up to date.

Putting the pieces together

"Our challenges are getting all the pieces together at the same time," says Bonnie Long, principal of Junior High School 56, on Henry Street. Expenses include not just hardware, but electricity, appropriate furniture, and security in the

computer rooms. Last year, the school spent between \$65,000 and \$70,000 for 32 new Apple 5200s. The money came from a combination of state and federal grants.

Technology can create unique experiences for students and their teachers. Last year, students in District 1 had the chance to chat on-line with Rosa Parks, the famed figure of the civil rights movement. They use Scholastic's on-line service regularly to discuss books with their authors.

As schools acquire and use technology, students like Sumiya Rahman will reap the benefits. By the time she reaches seventh grade in

the year 2001, Sumiya will be able to go on-line to learn about immigration in New York City and the rest of the United States.

The federal matching grant is part of a program called American Gateways. Students in District 1, along with Districts 4, 5 and 75, will communicate with students in 23 other school districts across the country, sharing research about immigration patterns in areas ranging from Brooklyn to St. Louis to the Oregon Trail.

Within five years, Mrs. Zornberg predicts, 75% of the district's teachers will be using computers in their classes and each school will have a buildingwide network.

"You won't find another district in the city with this level of technology," she says. ■

Internet low on teachers' wish list

Getting more computers into classrooms and networking them for instruction is a more urgent priority than having hardware to surf the Net, educators say in a poll out Thursday.

By Tamara Henry, USA TODAY

More than 94% of the 1,001 teachers and school superintendents surveyed by Jostens Learning Corp. and the American Association of School Administrators (AASA) said computer technology has improved teaching and learning in USA schools.

While the importance of linking schools to the Internet is widely touted, the poll found computers are most frequently used for classroom instruction, teaching basic computer skills or record-keeping.

Student research on the Internet accounts for less than a third of computer use in schools, the poll found.

Underscoring the poll results, Robert

Spillane, Fairfax County, Va., school superintendent, says, "The main thing is the academic mission. Technology is just another stimulant but a very important tool. It's important that school systems of any size use technology."

About 90% of U.S. schools have computers, and 65% of them have some access to the Internet, but key findings from the poll show:

35% want their districts' highest priority to be connecting classrooms to the school's computer network; 29% list Internet access. 30% use computers for instructional purposes 26% to 50% of the time; 21% do so more than 75% of their day. 49% say teachers use computers most often in the computer labs; 35% use

them in the classroom. 45% point to the need for teacher training in computer technology. 60% strongly agree that the use of computers in the classroom has improved teaching and learning in the school district; 48% list a small improvement in test scores; 46% cite a small improvement in individualized assessment of student performance; and 61% cite improvement in student motivation.

The AASA is a 15,000-member group of principals, superintendents and other school leaders. Jostens is an educational software company based in San Diego.

Margin of error for the survey is 3 percentage points.

■

THE CHRISTIAN SCIENCE MONITOR April 11, 1997

A Contest on The Ideal School

STUDENTS will share their concept of the ideal school at the International Children's Summit, which will be presented June 9 to 13 by Disney magazines, the Just Think Foundation, and UNESCO at Disneyland Paris.

Four teams of students from the United States will join nearly 600 children from more than 40 countries to participate in workshops and brainstorming sessions on issues that affect children.

The contest is open to children ages 7 to 14. Since "society" is the theme, children must work in teams of two to three to enter. Each entry can be either a visual image or a detailed written description of the team's ideal school - including what they would teach and how they would teach it. It should be presented on an 8-1/2-by-11-inch single sheet of paper or a single computer screen of text and/or pictures.

The deadline is a postmark or on-line posting date of April 21, 1997. The four winning teams will be notified in mid-May. Winners will work with Disney and the Just Think Foundation, a media literacy group, to produce a video.

For entry information and complete rules, call 800-728-6490, or check the Children's Summit Web sites at www.disney.com, or www.justthink.org.

-Staff

would "send a clear signal of retreat to the rest of the world" that would undermine its global leadership.

Similarly, he argued, expanding

exports and trade is essential to the nation's future in the emerging global economy. Every president since 1974 has held fast-track negotiating authority.

Clinton demanded that Congress renew it for him rather than yielding to fears of global competition. ■

USA Today

April 14, 1997

Online replacing phone line for teens in touch

Teen-agers are turning the computer into the Princess phone of the '90s.

Those love-bugs trading sweet cyber-nothings over the Internet in the current AT&T commercial aren't just an ad agency fantasy. They're doing what comes naturally to a generation whose social life hinges on skills once squandered on Donkey Kong.

About 18.8 million U.S. kids under 18 years of age have access to home computers, says a 1996 study by Forrester Research of Cambridge, Mass. And a survey last year by Georgia Tech's Graphic, Visualization and Usability Center found that 11% of Internet users worldwide are under the age of 15.

"I've had an America Online account since seventh grade," says Michael Wakerley, 15, a high school sophomore from the Silicon Valley suburb of Mountain View, Calif.

He has never scanned his sweetheart's face onto a work of art or passed digital love notes like the kids in the commercial, "but they're not doing anything far-fetched," he says.

Young and Rubicam's Tom Pratt, the man behind the AT&T spot, says his 13-year-old son sparked the idea for the ad.

"As soon as he gets home from school he's on the computer seeing what his friends are up to," Pratt says. "Kids aren't intimidated by the technology."

It's a boon to homework and a bonanza for teens' social life, further

research shows.

Teen-agers use the Internet an average of 8.5 hours a week for chatting and e-mailing, compared with 1.8 hours spent using it for school work, shows a study released last month by Cheskin Masten/Imagenet of Redwood City, Calif.

Teen chat rooms, the party lines of the Internet, flicker day and night with kids' views on music, movies, hobbies and love.

Seventeen-year-old Bonnie Deterding of Houston chats for hours at a time, sometimes late at night, and swaps e-mail three or four times a week with a male friend who is away at college. "It's much more exciting to get e-mail than a phone call," she says.

Does she ever write him a letter?

"A letter? Oh, with a pen . . ." she says, after a long pause. "Not really."

"I never use a phone if I can e-mail," says Tom Musante, 19, who Rollerblades 6 miles daily from his Los Altos, Calif., home to hang out at a cyber cafe called <http://www.mvccc.com>.

In addition to selling lunch and gourmet coffees, owners Tom Wong and Linda Yang, former software developers, offer unlimited e-mail for \$5 a month and Internet access for \$5 an hour on the PCs scattered around their cozy cafe.

"I've spent as much as five hours here in one day," Musante says, half of it having cyberchats with girls. "It's great

because any relationships that develop are a result of your mind, not what you look like."

Boys spend 45% more time on the Internet than girls, the Cheskin Masten study shows, but both sexes report spending about 3.6 hours a week using e-mail. The increasing number of Web sites aimed at teen-age girls may help close the gender gap.

Author Posey Krakowsky of New York has based several teen novels on how girls use the Internet.

"It's the classic image of teens on the phone all night, giving advice and helping solve each other's problems."

A recent visit to a Web site for girls turned up chat room topics like penpals, careers, makeovers and how to flirt, along with a ninth-grader seeking online counsel from her virtual girlfriends. "I acquired a cyber boyfriend last night who says he's in eighth grade, but he's probably some 40-year-old perv/child molester," she wrote. "How can I be sure he's who he says he is?"

One solution may be audio-active software like VocalTec's Internet Phone, which enables users to have voice conversations over their online PCs.

The sound quality isn't perfect, says VocalTec's Scott Wharton, "but it beats having your parents yelling at you to get off the telephone."

By Linda Temple, Special for USA TODAY ■

USA Today

April 14, 1997

2-year-college all-stars work for a better world

By Pat Ordozensky, USA TODAY
When the entire men's basketball team at Tyler (Texas) Junior College graduated on time last year, a big reason

was Adam Daley. He tutored the players and persuaded them to take academics as seriously as jump shots.

"I nearly burst with pride," Daley

says, "when I watched each man cross the stage and receive his diploma."

When students at Quincy (Calif.) High School think seriously about college, one

school buildings report the task force will review. It estimated that it would cost \$10 billion to repair and update public school buildings in Ohio.

Last week, John M. Goff, state superintendent of public instruction, said

rough estimates show it would take \$4.4 billion to correct serious health and safety code violations.

The state has a malfunctioning building assistance program that the

General Assembly is trying to fix in the new budget. The court took exception with the program's level of spending, but the court decision was based on 1991-92 figures. ■

The Star-Ledger Newark, NJ

04/13/97; Edition: UNION; Section: UNION; Page 050

Students find joy comes from sharing

Work at Food Bank shows teens a world not centered on them

By Andrea Orlando
Star-Ledger Staff

What eighth-grader Eddie Thompson liked about volunteering at the Community FoodBank of New Jersey in Hillside was that he had a chance to assist people who needed his help.

"It was fun," said the tall, soft-spoken boy. "It shows you to take your time to help others, especially those who are in need."

Thompson was one of 19 high school and middle school students from the Union County Alternative Education Program on the Kean College campus who lent a hand at the massive food bank Friday.

He and the other eighth-graders are from Passaic. Other high-school-aged students come from throughout Union County.

At the food bank, the middle school

students looked at the expiration dates on the cans to determine whether the food was fresh and looked for cans with dents in them. They discarded the stale food and the food in dented cans.

Some of the bigger boys moved heavy boxes alongside the adult volunteers and regular workers at the food bank, some of whom are ex-convicts.

"It was really an experience to work with criminals," said Barry Smith, a high school student who lives in Rahway. "They're just people. You couldn't tell who was who. You shouldn't separate people just because of what they did in the past."

Larry Lima, a social worker at the school, helped organize the one-day trip.

"As adolescents, they don't want to be associated with the community, and this helps them get a sense of the bigger picture, that the world doesn't revolve

around 'me.'"

More than 6,000 people volunteer each year at the food bank, which distributes about 1 million pounds of food a month to the needy. The 280,000-square-foot Hillside warehouse is the largest operation of its kind in the nation.

The food is donated by corporations. The recipients are more than 1,500 organizations throughout the state, including food pantries, soup kitchens, homeless shelters and shelters for battered women.

"They did a great job," said Althia Comer, volunteer coordinator at the food bank. "We really, really depend on volunteers to help out. We're only a staff of 62 paid people, so there's no way we could possibly sort out the poundage of food that we get." ■

The Star-Ledger Newark, NJ

04/13/97; Edition: SOMERSET; Section: SOMERSET; Page 053

All wired up for the Internet Volunteers help link elementary schools

By Kelly Heyboer
Star-Ledger Staff

Thanks to a few volunteers and about 2,000 feet of cable, Montclair's schools are totally wired today.

Parents and faculty members spent yesterday morning in three elementary schools, completing the school district's link to the Internet in an "electronic barnraising" that began last fall.

Using a kit manufactured by Lucent Technologies, volunteers linked five classrooms and a media center in each school to outside phone lines.

Groups at Rand, Nishuane and Hillside schools dragged cable from room to room and pushed the wiring through holes pre-drilled by district maintenance workers.

Though all 11 of Montclair's schools are now capable of communicating to each other and the outside world via the Internet, students shouldn't run to school tomorrow hoping to log on to the World Wide Web.

Just because the schools are wired for computers, doesn't mean the computers have arrived, said Rita Miragliotta, a

teacher helping coordinate the wiring.

"This district still has to install (computer) servers in each building," said Miragliotta. "We hope to be set up in each school by the fall. Then we will be totally intranetted and Internetted."

The district began installing the wiring needed to link the schools last October under the statewide Netday NJ program. Chase Bank and Lucent Technologies donated the funds to pay for the wiring kits.

The \$690 wiring kits used to link the remaining six schools over the last two

Saturdays were donated by residents Alan Bildner and the Rabinowitz and Weston families.

Several schools, like Montclair High School and Northeast Elementary, already are linked to the Internet and have begun incorporating global link information into their curricula.

Miragliotta said her 5th graders at Northeast School used classroom computers to do research class projects on World War II and to ask questions of on-line speakers, including former-president George Bush.

Though many of the children and teachers have desire and the ability to use the Internet on a daily basis, physically wiring aging buildings for the 21st century has been a problem in Montclair, school officials said.

Like many districts around the state, Montclair had to find creative ways to thread wires through structures build for another era.

"Some of the buildings are old. We've had to go through the attic and drop ceilings and use moldings to cover the wire," Miragliotta said. Debby Miller, a

computer programmer with two children attending Montclair schools, said she and other parents volunteered to do the wiring grunt work because they felt their children were getting an incomplete education without the Internet in their classrooms.

Although her children, Sarah and Alex Minkoff, ages 9 and 6, already use their home computer to access the Internet, Miller said other students without home-access may be slipping behind.

All wired up for the Internet in Montclair. ■

Houston Chronicle

04/12/97; Edition: 3 STAR; Section: A; Page 35

News Wrap-up

Reinstating student status important

By JOANN ZUNIGA
Staff

COMMUNITY forums held by the U.S. Immigration and Naturalization Service have brought up a multitude of questions regarding the Illegal Immigration Reform and Immigrant Responsibility Act of 1996.

One of the latest questions dealt with foreign students who stop attending school and how they may prevent any immigration problems by reinstating their status and returning to school.

Kent Miller of the Bilingual Education Institute said he has seen the beginning of a pattern where students are interested in registering for school again after their student status had lapsed.

"Students are definitely doing the right thing going back to school, but they need to ask INS to reinstate their status," Miller said.

Medical reasons or dire financial conditions can be valid excuses for students having allowed their school attendance to lapse, said Houston's acting

INS district director Richard Cravener.

Miller said once INS reinstates student status, he recommends that students meet attendance and other educational requirements.

"The worst thing a student can do is leave the country without trying to reinstate (student status); they won't be allowed to return to the United States for up to 10 years," Miller said.

The forums include officials, advocates and lawyers dealing with immigration. ■

Los Angeles Times

* 04/12/97; Edition: Orange County Edition; Section: Metro Desk; Page A-1

Head Lice Getting Ahead of Treatments, Officials Fear

Health: Outbreaks of the parasites are increasing amid concern that they are developing resistance to medications.

By DAVID COLKER; TINA NGUYEN
TIMES STAFF WRITERS

At one Irvine school, the situation was lousier last fall than ever before—37 students and a teacher found with head lice, as opposed to the usual fewer than 10 cases in an entire school year.

And some of the cases seemed especially hard to cure. One Irvine student's problem was so perpetual that he missed 25 school days.

"Some kids keep coming back with

lice," said school district nurse Sally Valentine, "and their parents are apparently religiously trying to treat the situation."

The latest word from the public health front offers little comfort to school officials. Ordinary head lice may be turning into "super lice," developing resistance to over-the-counter treatments that are parents' chief weapon against the repulsive bloodsuckers.

This might explain why head lice

infestations—which medical historians trace back at least 9,000 years—seem to be on the upsurge.

"I'd say there is a definite increase," said Dr. Vicki Kramer with the California Department of Health Services, who deals with public schools and health departments on head lice.

"I'd say we have a 20- to 30% increase in the number of calls in the last year."

Kramer believes resistance—the medical term for this type of

Getting Wired, U.S. Schools Face Steep

Learning Curve

By JUNE KRONHOLZ

Staff Reporter of THE WALL STREET JOURNAL

Alice Deal Junior High School in affluent northwest Washington, D.C., plugged into the Internet three years ago, well ahead of President Clinton's campaign injunction to wire the nation's schools to the future.

How has the Internet changed education at Alice Deal? Not very much, it turns out. And the same is true in most of the nation's schools, where few teachers have yet integrated the Internet into their lesson plans. The hurdles are towering—and go well beyond the nuts-and-bolts job of hard-wiring.

At Alice Deal, the telephone system is so overburdened that it has lines to connect only two computers to the Internet—and the teacher who presides over one line doesn't use it. The school system installed a closet-sized modem to bypass the phone lines and connect every class to the Internet and to each other, but hasn't appropriated funds to wire the classes to the modem. The school has 150 computers, but they include Commodores and Apple IIs ("old as dust," says social-studies teacher Doris Williams), and most of them can't talk to one another.

So Mrs. Williams, computer-trained and technology-ready, isn't using the Internet in class. "I didn't want to do anything I didn't have the technology to use," she says.

The president wants to spend \$2 billion over the next five years—\$425 million next year alone—to wire every school. It's easy to see why:

Eighth-graders in Bayonne, N.J., pull down National Aeronautics and Space Administration satellite images that show the Gulf Stream's meanderings. On a National Science Foundation Web site, grade-schoolers can "Ask Dr. Math" about the complexities of numbers ("is infinity odd or even?" a student named Tracy wondered recently). And high school astronomy students in Alexandria, Va., use the Internet to transmit instructions that aim the telescope at California's Mount Wilson Observatory, which then relays back images of the night sky.

These experiments, however, are more the exception than the rule—for lots of reasons. Only about half the nation's teachers have had any training in technology and

applying it in the classroom. Though two-thirds of U.S. schools claim to have access to the Internet, that usually means a single telephone line connected to a couple of computers in the library. Today, the most common classroom use of the Internet, students tell pollsters, is "browsing."

Then there's cost. Public schools will spend about \$4 billion on technology this year. But equipping schools with one computer for every five students—a generally accepted optimum—plus connecting to the Internet, training teachers and buying software would cost \$109 billion over 10 years, McKinsey & Co. estimated in a 1995 report. Even if President Clinton's Internet plan sails through Congressional budget review, the outlay will fall

far short of this sum.

In states like California and Massachusetts, platoons of volunteers are wiring schools in much-publicized "Net-

days." With such public-private cooperation, the U.S. Department of Education is optimistic that the plan to wire all schools by 2000 is achievable.

But older school buildings, especially, pose enormous challenges. To extensively rewire, Alice Deal in Washington needs specialized electricians with huge drill bits to cut through its concrete floors and 3-foot-thick walls; it has no money in the budget for such experts. Its phone system is another liability. Some years back, when then-President George Bush visited, the Secret Service strung new telephone trunk lines into the school. That should have solved the school's problems, but then the Secret Service rolled up the lines and took them away.

Asbestos insulation is another complicating factor in older schoolhouses. Many schools have to hire special asbestos-abatement teams to work alongside electricians during wiring.

A more serious question is what to do with the Internet in class. Students can access libraries and museums around the world and summon up mountains of periodicals and abstracts—but much of that data is available on CD-ROMs and software at less cost, school librarians say.

"It's not the access to materials that will make a difference" in education, argues Nora Sabelli of the National Science

Foundation. The Net's main value, she says, will be "breaking the isolation of the classroom" by allowing children to talk to experts, exchange ideas and tap into real-time information.

First, however, teachers must get up to speed. Two-thirds of the money being spent on classroom technology now goes for hardware, while only 5% is spent on training. Only 18 states require new teachers to have any technology training, and only five require veterans to complete such classes.

At Winston Churchill High School in Potomac, Md., teachers attend after-school and summer computer

classes. And to stay current, they consult a panel of student computer advisors. Alice Deal's computer teacher Donna Mason scours foundations for training money—and then uses her lunch hour to coach colleagues.

Using a National Science Foundation grant, Stevens Institute of Technology in Hoboken is helping some New Jersey schools develop an on-line curriculum and is training teachers to use it. But for a school trying to go it alone, the Internet can be bewildering.

Web sites come and go, making most too unreliable to use in class — "not like a library, where you're fairly sure the book will still be there tomorrow," says

More...

Getting Wired. continued...

John Dell, a physics teacher at Thomas Jefferson High School for Science and Technology in Alexandria, Va. Real-time information like satellite images takes several minutes to receive — too slow for a 50-minute class. Nor can information be authenticated: "You can have every kind of crank point of view," adds Mr. Dell.

The government underwrites some of the best educational Web sites. Textbook and educational software publishers are only now beginning to develop Internet curricula. But these programs don't neces-

sarily gibe with school curricula. Learning Co. is putting up a Web site called MayaQuest that will follow record-breaking bicyclist and explorer Dan Buetner as he visits South American archeological sites. The company readily concedes that Mayan culture isn't a core subject at most schools.

For some parents who have made mediocre schools a hot political issue, the Internet may seem like an expensive frill.

Even as children travel electronically to volcanic islands and barrier reefs, parents are demanding something quite different from schools: more emphasis on basic skills.

So far, no one has figured out how to teach reading, writing and math on the Internet; those fundamentals still require teachers. Yet the Internet can reinforce basic skills and inspire — giving children "a reason why they want to read," says J. Michael Williamson, a whale researcher at Wheelock College in Boston who chats with kids on the Web site WhaleNet.

The Washington Times MARCH 19, 1997 / A10

Teachers union stresses academics

Says emphasis on job training undermines federal program

By Carol Innerst
THE WASHINGTON TIMES

School-to-Work programs fail when they emphasize narrowly focused vocational training programs and minimize academic achievement, the American Federation of Teachers asserts in a report issued yesterday.

Jumping into an ongoing debate over a contentious piece of federal legislation, the 925,000-member union spoke with 40 school authorities and visited five after the enactment of the 1994 National School-to-Work Opportunities Act spurred the growth of School-to-Work programs in the states.

"We didn't find one program we felt we could put on a pedestal and say, 'Replicate it,'" said Dawn Krusemark, senior associate in the AFT's educational issues department and lead author of "Reaching the Next Step." "We found schools with pieces of quality programs."

The universal shortcoming in the AFT's eyes was "a lack of high standards — too many kids not being asked to do rigorous course work," Miss Krusemark said.

"We need a new way of thinking about this issue," said Edward J. McElroy, the union's secretary-

treasurer, who called for a "school-to-career" approach that requires students to meet rigorous academic standards.

"We're preparing students for careers, and their work will change over time," he said. "That's why a good school-to-career program should provide a solid academic foundation. It gives students more options: college, training, or entry into the work force."

It will take more than higher standards to get some conservatives on board the STW train. Many see the legislation as part of a managed-economy and data-collecting network that threatens Americans' freedom of choice and privacy.

"I've always supported vocational education as long as it's locally managed and run, but the federal STW Opportunities Act gives the secretaries of education and labor the authority to issue whatever procedures, guidelines and regulations are needed to enforce the act," said Rep. Henry J. Hyde, Illinois Republican. "What it means is unlimited federalization of education. Nobody knows what it's going to cost."

At a Feb. 12 education conference on Capitol Hill hosted by Mr.

Hyde, Michigan state Rep. Harold Voorhees cited differences between a traditional "academic" education and the STW plan to "train" students, then track them into jobs selected by economic planners.

"Vocational education will be the only education system because students will need a certificate of initial mastery to get a job," said Joe Esposito, a self-employed contractor in Tulsa who has become an anti-STW activist.

There are now an estimated 500,000 students at 1,800 schools involved in STW programs, with work-based workshops at 135,000 businesses. Thirty-seven states get federal money to implement programs; the rest develop their own.

"We do not want STW programs detracting from the academics," Miss Krusemark said. "We want them to motivate students to do better at academics."

"Some students are disengaged at school," she said, "and this way of teaching kids, whether integrating academics with a vocational program or bringing vocational examples into the classroom, helps kids understand why they are learning the academics. Learning for the sake of learning is not enough for some kids."

Survey tracks the Net gains in schools across nation

By Martha Woodall
INQUIRER STAFF WRITER

While half the nation's schools have access to the Internet, only 13.4 percent of educators believe it helps students achieve better results in their academic subjects, according to a new survey.

The "National Survey of Internet Usage: Grades 3-12," released last week, reported that 45 percent of the educators surveyed believe the Internet motivates students to learn. But 81 percent said information on the Net needs to be better organized and tied more directly to curriculum and textbooks if Internet usage is going to boost student test scores.

The questionnaire was distributed to 6,000 teachers, computer coordinators and librarians in December by Market Data Retrieval, a Connecticut information firm that is a division of the Dun & Bradstreet Corp. The survey was undertaken in cooperation with Education Market Research, a company that does market research. Eleven percent of the questionnaires were returned.

Kathleen Brantley, product manager at Market Data Retrieval, which has been tracking school technology trends for 15 years, said the survey was intended primarily to inform textbook publishers and software

ware manufacturers which educators were using the Internet and how.

Among the other key findings:

- Instructional use of the Internet is highest in the Northeast (51.4 percent) and lowest in the South (about 30 percent).
- Most students with access to the Internet at school (76.5 percent) use it once a week or more.
- Teachers in grades three through five use the Internet just as frequently as those in high schools.
- Seventy-six percent of the educators say

the Internet is a useful tool for research, and 53.4 percent say it's useful for connecting students to the "real" world.

- On average, schools with Internet access have had it for 11 months and can access the Net from 5.4 terminals.

- Most educators (85.5 percent) say a shortage of computers, modems and phone lines limits Internet usage by teachers and students.

- A lack of training for teachers was cited by 80.5 percent as another obstacle to Internet use.

Brantley said that while the survey-makers had no preconceived notions about how teachers were using the Internet before beginning the survey, they were surprised by the high Internet usage reported in third-through fifth-grade classrooms.

"There is a tendency to think that high schools have more access," she said.

But even small elementary schools, such as the Oak Lane Day School in Blue Bell, which has 140 students, have found that the Internet offers learning opportunities for young children. At Oak Lane, which has had access since September 1995, youngsters

have turned to the Internet to gather information about women mathematicians, to research their own family genealogy, and to exchange environmental information with students around the world.

"It has been tremendously helpful," said Lauren Deane, the school's media specialist.

Because Oak Lane is linked to the Internet via a single modem in the media center, Deane uses software that enables her to download information from the Web so teachers can use it on their classroom computers.

The children will show some of their work to parents and community residents on Saturday, at what the school is calling "The Virtual Gallery: A Kids Technology Expo."

Market Data's Brantley said survey takers also were a bit startled to find that only 13.4 percent of teachers with access to the Internet believe usage improves students' academic performance. Brantley suspects that that "might be a factor of the newness of the technology."

For example, despite the emphasis that has been placed on educational usage of the Internet since President Clinton announced his technology literacy challenge a year ago, 40 percent of the respondents said their schools have been linked for less than six months.

That's certainly the case at Cherry Hill High School West. It gained Internet access using high-speed T-1 lines at 16 workstations in September.

Denise Wiltsee, the school's media specialist, said "it's just too early to tell" how Internet usage by students is affecting their academic performance. But, she said, the Internet clearly is changing their views toward research projects.

"What I have observed here is that [research using the Internet] is not a chore to students the way some see with books or magazines,"

she said. "There is an attitudinal change to the whole process."

Wiltsee said the biggest challenge for educators is ensuring that students apply their critical thinking skills when they evaluate material found on the World Wide Web. She reminds them that just because something has been put up on the Web does not mean it's true.

The Internet's motivational powers were witnessed by Mike Craig, a math teacher at Bensalem High School, who followed a six-week Internet project in a colleague's math class for his thesis. He observed as fellow teacher Susan Cantwell used

a virtual travel agency project with a math class of at-risk students who do not enjoy school and do not plan to attend college.

The students turned to the Internet to gather weather statistics and other information about selected travel destinations, which they displayed on spreadsheets and

analyzed.

"Their grades overall during this project were much better," said Craig, who will describe the findings in the thesis he's writing for a master's degree in educational technology at Chestnut Hill College.

During the project, he said, Cantwell's class met in a computer lab. Although there was a single modem with Internet access and students had to take turns, Craig said attendance improved.

"While they were using the Internet, there was much more of a focus," he said.

When the project was completed, and the students returned to their classroom and textbook-based lessons, attendance dropped.

Computers allow a virtual shift in higher learning

By Mary Beth Marklein
USA TODAY

Nursing professor Sheila Englehardt wanted to make life easier for her graduate students, many of them adults juggling school, family and work. So besides coming to her Tuesday night class last semester at the University of North Carolina at Chapel Hill, students could reach her by e-mail, contribute to an ongoing online class discussion and use the World Wide Web as a textbook.

That's just the start, says Englehardt, who's convinced "the sky's the limit" in electronic education.

Elsewhere on campus, a chemistry course is being beamed across the state. A language professor's software helps students write and comprehend French. And a master's program for public health officials will go on line next fall.

Like colleges nationwide, the University of North Carolina is counting on technology to reach more people more efficiently and effectively.

But forays into virtual universities don't stop there.

► The most ambitious endeavor is the Western Governors University, being developed by 13 states, which will operate entirely in cyberspace. The vision of two governors at a 1995 conference in Utah, the university ultimately will deliver degrees using technology that reaches people anywhere in the world.

► The nonprofit Alfred P. Sloan Foundation in New York has pumped more than \$15 million into campus-based projects around the country to explore "asynchronous learning networks" that let anyone with a computer and modem take courses anywhere, any time. None of the interaction between student and instructor will have to take place at the same time.

► Private ventures include a recently launched computer network by Sylvan Learning Centers and MCI that will offer courses for college credit, continuing education and professional training.

► And IBM has signed on with 35 schools in the USA and worldwide to pilot a "global campus" in which students register for and take classes through computer networks.

For years, colleges have pioneered the work of delivering education electronically, either over the Internet or with two-way video hookups. Distance learning now accounts for 20% of college instruction, says Pat-

rick Portway of the United States Distance Learning Association in Livermore, Calif.

But expansion has quickened in recent years, pushed partly by a host of practical considerations.

Western states, for instance, project a 30% increase in college-age students over the next 5-10 years. With funds tight, the governors want to accommodate more students without spending more money on new campuses or buildings.

Another motivation is the seemingly endless demands on today's workers, who "in this information

economy are lifelong learners," says Burks Oakley II, associate director of a Sloan-funded project at the University of Illinois at Urbana-Champaign.

No one's saying traditional undergraduate programs will disappear. "It's like watching a football game," says Michael Hooker, the chancellor at Chapel Hill. "Nobody would argue that you can see a game better from the stadium than you can from TV, but there's something about being there that has appeal."

Similarly, he says, "For 18- to 22-year-olds, so much of the value is in the intellectual ambience on campus

rather than the classroom. But how important that element is when you want to learn rather than have an experience is an interesting question."

For those people, the control room replaces the classroom as the vital link to their education.

When students no longer must go somewhere to be educated, the credits they accumulate for the hours spent in the classroom become meaningless. "The only thing that really counts is, 'What do you know at the end?'" says Peter Ewell of the nonprofit National Center for Higher Education Management Systems in

Boulder, Colo.

That creates an opportunity to base achievement not on completing a course but on acquiring competency. Architects of the governors' plan envision students — they'll be called "clients" — taking more control of their learning, even designing their curriculums. And when that happens, some theorize, educators will be held more accountable.

It's "pushing colleges to improve their teaching and learning environment," says Sally Johnstone, director of the Western Cooperative for Educational Telecommunications in

Boulder, Colo.

► Standards of quality will have to be redefined, too. Long-standing measures like the number of books in the campus library seem almost quaint. "Now it's got to be access to information," says Steven Crow, deputy director of the North Central Association of Colleges and Schools in Chicago, one of the regional groups that accredit colleges.

More...

shift in higher learning

continued...

A more immediate concern is showing faculty, routinely mentioned as a key source of resistance, how to adapt. Many pioneers in the virtual concept see the role of faculty changing from one of imparting knowledge to one of helping students make sense of all the information available to them.

Not everyone welcomes such change.

"If you're trying to eliminate (the faculty's) role in teaching, defining and controlling subject matter, you've spelled the end to university

education," says Kenneth Ashworth, commissioner of the Texas Higher Education Coordinating Board.

Even fans have worries. Englehardt is developing a course to be offered entirely on line, but she says earning a degree that way is too much. "Human contact is very important," she says.

Utah Gov. Mike Leavitt, one of the prime backers of the governors' university, encourages the feedback.

"This process needs critics," he says. But change is afoot, he warns, and colleges either have to be in front of it or get rolled over by it."

USA TODAY • WEDNESDAY, DECEMBER 18, 1996 •

P-7D

On-line university faces uphill battle

Much of the technology virtual university visionaries are counting on doesn't exist yet.

But it will, says Utah Gov. Mike Leavitt, who with Colorado Gov. Roy Romer announced plans last fall for a Western Governors University. More pressing concerns, he says, are regulations, bureaucracy and fear.

The university's debut in late 1997 will be modest, offering an electronic catalog to help people find on-line courses at existing institutions.

Degree programs come later.

But there'll never be a campus. Students who want academic or fi-

nancial aid counseling could go on line, call toll-free or visit a learning center in participating states.

Challenges remain, including:

► **Money.** Each of the 13 participating governors has committed \$100,000, and private and nonprofit groups have donated funds and services. But planners say they need even more money — the catalog could cost \$10 million.

► **Accreditation.** Accrediting bodies, which are regional and usually deal with state issues, will have to make changes when geographic boundaries disappear.

► **Copyright issues.** As courses go on line and software is devel-

oped, copyright issues will emerge.

► **Financial aid.** Federal and state laws on student eligibility for financial aid and in- and out-of-state tuition need to be ironed out.

► **Competency-based assessment.** The issue raises questions among academics, especially if industry would help define terms, an idea the governors are considering.

"If it's solely determined by business or corporate leaders, the emphasis will be on vocational training rather than critical thinking," says Iris Molotsky, spokeswoman for the American Association of University Professors.

IBM to help colleges expand cybercampuses

By Dennis Kelly
USA TODAY

The move toward virtual universities — schools where faculty deliver education over computer networks — moves another step ahead today with a new service offered by IBM.

Big Blue is announcing the start-up of IBM Global Campus, through which it will market

technology and expertise to help colleges put their courses on line. Global Campus will allow students to register, apply for financial aid and get academic counseling, all on line.

The company says it has already enrolled more than 30 colleges or university systems to pilot the project, including the entire 23-campus California State University system.

The list includes 11 in countries such as Brazil, Canada, Mexico and Australia.

Distance learning — delivery of education through computers or cable TV — has been soaring for years as colleges have expanded their reach to students unable to come onto a campus for various reasons. Patrick Portway, executive director of the United States Dis-

tance Learning Association in Livermore, Calif., estimates 20% of higher education takes place this way now.

The significance of IBM's move, he says, is that it makes start-up easier for schools that lack expertise or face other limitations.

For instance, Cal State's executive vice chancellor, Molly Corbett Broad, says the sys-

tem's existing computer networks "are overburdened."

David Merkwitz of the American Council on Education says there are still unanswered questions about distance learning, including quality control and student testing. Still, he says, the IBM move "is a signal that they see a market out there. But where it goes is still a little uncertain."

Special Edition

Daily Education News

U.S. Dept. of Education
Office of Public Affairs
FOB-10, Room 2200



ARTICLES ON TECHNOLOGY CHALLENGE GRANTS OCTOBER 1996

This special edition of the *Daily Education News* includes news articles on ED's technology challenge grants which were awarded on October 2, 1996.

If you have any questions about this publication or would like additional copies, please contact Eileen Nicosia/OPA (401-0316).

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TITLE: Grant will help students and residents go on-line
BYLINE: Lillian Salazar Leopold
CREDIT: STAFF WRITER
EST. PAGES: 2
DATE: 10/05/96
DOCID: SDUN3201153
SOURCE: The San Diego Union-Tribune; SDU
EDITION: UNION-TRIBUNE; 2,4; SECTION: LOCAL; PAGE: B-2
ORIGIN: Students and residents in National City
(Copyright 1996)

(CA)

Students and residents in National City -- the poorest city in the county -- and other South Bay communities will have access to computers and the Internet under a \$4 million U.S. Department of Education technology grant awarded to the Sweetwater Union High School District.

The money will be distributed over five years and will be used to train all 1,300 district teachers, provide each with multimedia computers and put computers and Internet access into the hands of South Bay residents.

Students will have computer and Internet access in the classroom. They will be able to go to the public library or community center and get homework assignments. Parents will be able to e-mail teachers. Community members can access city schedules, permits and job applications. And professionals will be able to answer students' questions, live from anywhere in the world.

"This is an example of a whole community coming together around its future and its children," said Mario Moreno, assistant secretary of education.

"We need to build bridges of learning between schools, homes and businesses," Moreno said. "Sweetwater was the shining star that kept floating up to the top" of the application process.

The grant, the Advanced Curriculum through Technology (ACT) Now!, was announced Wednesday by federal representatives and administrators in the 30,000-student district.

Sweetwater and Berkeley Unified were the only districts in the state and among the 24 in the nation to receive the \$23 million in federal **Challenge Grants** this year. The Education Department awarded 19 grants last year.

During the five years, the district's two junior high schools, its high school and the adult school in National City will be the greatest beneficiaries with a core of teachers being trained to teach other teachers from the schools.

Those attending the academy will receive computers and produce lesson plans that will include the use of technology in all subjects. Those lessons will be available for distribution throughout the Sweetwater district, similar to a program run for several years by the Grossmont Union High School District.

In the second year of the grant, the district will put computers in community centers including the National City Public Library and the New Beginning Family Resource Center based at Kimball Elementary School.

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By year three, students in National City schools will be developing multimedia portfolios to reflect what they are learning and they will be making student presentations over the Internet, a skill all students will need, district officials said.

"It's been said that the art of teaching is the art of assisting discovery," said board president Steve Hogan. "Technology is the tool of choice for discovery, but only if we have that tool and integrate it into the curriculum.

"This kind of commitment to technology means every student, every classroom, every teacher, every campus will benefit," Hogan said.

In the final year of the grant, district administrators envision all area schools, regional libraries, community health centers and public offices having access to the Sweetwater network and to the world.

Federal education representatives said that with access to the best museums and libraries, the most learned professionals in their fields and information on anything available on-line, all residents can continue the quest of being life-long learners.

**PEKIN SCHOOLS TO GET \$3.49 MILLION GRANT;
DISTRICT 108 WILL USE MONIES TO PLUG INTO
INTERNET INFORMATION**

by Omar Sofradzija

PEKIN--Instead of relying solely on the tried-and-true way of learning civics through a book, students and teachers in Pekin will have almost \$3.5 million over five years to figure out how to do the same thing using the Internet.

U.S. Department of Education officials today will award Pekin Grade School District 108 a \$3.49 million grant, aimed at broadening civics education and improving community discourse with computer networks and other technology.

The district is one of 24 school systems nationwide recently picked by federal officials to divvy up \$23 million in grant money in hopes of creating model programs in the education department's Challenge Grants for Technology in Education initiative.

"We're looking at the classrooms not being bound by the walls of the classroom, or the clock," district Assistant Superintendent Chuck Bowen said Tuesday.

The federal dollars are earmarked for the district to fully implement an Internet-based social studies program, dubbed Learning Community 2000, for elementary and high school students within a five-year time frame, Bowen said.

Almost \$2.9 million will pay for equipment including laptop computers that students can take home with them with most of the balance going to staff salary and development costs, district finance director Guy Cahill said.

District officials credited their own Global Connections 2000 program with clinching the bid. That program will electronically connect Pekin schools with the city's library, the Dirksen Congressional Research Center, the Internet and other Pekin institutions and homes next year.

Also aiding Pekin's bid was the Dirksen Center's plan to create an electronic information clearinghouse and strong backing from Global Connections' business partners, including IBM, officials said.

"We had the infrastructure. We had the content. We had the staff. If any one of those three elements was missing, we wouldn't have gotten this (grant)," Cahill said.

To start the Learning Community plan, the district hopes to introduce its new social studies program to about 40 classes ranging from kindergarten through the eighth grade--in the 1997-98 school year, Bowen said.

More...

PEORIA, continued...

Officials hope the lessons learned will exceed the program's initial scope. "The kind of thinking we're looking at will go beyond social studies. We're looking at a new way of keeping school in an electronically sophisticated learning environment," Bowen said.

The Global Connections program will serve as a platform for that. "This allows us to put some content out on that infrastructure. We're trying to make it a two-way street," Cahill said.

That infrastructure also will be accessible to Pekin residents, via phone and cable television lines.

"This is a medium upon which a community can interact with one another," Cahill said. "It provides an opportunity to train the nontraditional student i.e., the lifelong learner."

The only other Illinois grant winner was Kirby School District 140 in Tinley Park, located in suburban Chicago.

8TH STORY of Level 1 printed in FULL format.

(ll) 5

Copyright 1996 Chicago Tribune Company
Chicago Tribune

October 3, 1996 Thursday, SOUTHWEST SPORTS FINAL EDITION

SECTION: METRO SOUTHWEST; Pg. 1; ZONE: SW

LENGTH: 578 words

HEADLINE: U.S. GRANT TO TAKE SCHOOLS INTO WORLD OF TECHNOLOGY;
MOSELEY-BRAUN DELIVERS FIRST INSTALLMENT IN 5-YEAR PROJECT

BYLINE: By Julie Deardorff, Tribune Staff Writer.

BODY:

Eighth-grade teacher Nadine Spear just could not resist chiding U.S. Sen. Carol Moseley-Braun as the two shook hands Wednesday in the crowded gymnasium at Prairie View Junior High School in Tinley Park.

Moments after Moseley-Braun had presented Kirby School District 140 with an \$853,871 oversized cardboard check as part of a \$4 million, five-year Challenge Grant Award from the U.S. Department of Education, Spear lightly informed her it was made out to the wrong party.

"The teachers are the ones who know what to do with it," said Spear, who teaches at Grissom Junior High School in Tinley Park. "The teachers will apply it. And the kids will be involved . . . whether they like it or not."

Chances are students will be involved a great deal. That is, especially if the grant money is used as planned for a project called Reality-based Learning, which has students and teachers from several schools acting as consultants trying to solve real-world problems. The projects will be generated through partnerships between business, students, teachers, government, community and higher education officials.

The Illinois Department of Natural Resources, for example, may team up with the schools by having students gather data about the ecosystem. Teachers would integrate that into the curriculum.

"The rungs on the ladder of opportunity in America are crafted in the classroom, both for individuals and for our collective economy," Moseley-Braun said to the audience of students, parents and teachers. "Today's ladders must include computers and information technology. Many of our schools, however, do not reflect this new reality."

Kirby and Pekin Public School District 108, near Peoria, were the only two Illinois school districts to win the grant money, which totaled \$23 million and went to a total of 24 school districts nationwide.

The consortium of schools that will receive money through the Kirby district grant, in addition to Prairie View and Grissom, include Shepard High School in Oak Lawn, Congress Park School District 102 in La Grange, Neal School in North

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Chicago, Morgan School in Bluffs, Mt. Carmel High School in Mt. Carmel, Whittier School in Chicago, Lepertown School in Bureau, and Braceville School in Braceville.

Kirby earned the grant because of district support and a strong group of teachers who began working toward incorporating technology into the middle school six years ago. Spear and another Grissom teacher, Ron Knop, began spending their summers taking classes at Argonne and working with the National Science Foundation.

They soon were joined by teachers from Prairie View: Linda Murray, Mary Dudash, Michelle Oseseck and Lisa Judds. By the end, a group of eight worked on developing the grant, which is for teachers as well as students.

"I've gone to classes and found only a small percentage of teachers are familiar with technology," said Murray, a 7th-grade science teacher at Prairie View. "We need to swallow our ego and allow kids to go with the flow. If we have the skills, we can all go forward together" in learning about technology.

Moseley-Braun was greeted at the front door by seven student council members and honor students. Before the senator entered, 12-year-old Amanda Frey pinned a yellow carnation on Moseley-Braun's jacket.

"I think the grant is great if it gives us better technology so we can have computers and the Internet," said Amanda, a 7th grader.

GRAPHIC: PHOTOS 2 PHOTO: Sen. Carol Moseley-Braun greets students at an assembly to announce District 140 is the recipient of a \$853,871 grant.; PHOTO: Eighth grader Joe Dance of the School District 140 Symphonic Band turns his ear toward the senator. Tribune photos by Walter Neal.

LANGUAGE: ENGLISH

LOAD-DATE: October 3, 1996

9TH STORY of Level 1 printed in FULL format.

7
(KA)

Copyright 1996 The Kansas City Star Co.
THE KANSAS CITY STAR

October 3, 1996 Thursday METROPOLITAN EDITION

SECTION: METROPOLITAN; Pg. C1

LENGTH: 388 words

HEADLINE: Local schools receive grants for technology;
Kansas City to head team of 11 districts in on-line research.

BYLINE: LYNN HORSLEY; LAURIE SCOTT, Education Writers

BODY:

The Kansas City and Independence school districts have received lucrative federal grants to enhance technology in the classroom, beating out hundreds of other districts.

The Kansas City district will head a team of 11 districts that was awarded \$ 3.2 million over five years to explore the Oregon and Santa Fe Trails via technology. The Independence district won \$ 1.9 million over five years to work with the Harry S. Truman Library to put original resource documents on-line.

"I salute the Kansas City district on this extraordinary honor," Rep. Karen McCarthy said Wednesday in presenting the U.S. Department of Education Challenge Grant to district officials.

McCarthy later appeared at a celebration in Independence.

The two districts were among 24 winning groups of districts out of 586 applicants.

The Kansas City School District will work with St. Ann's Elementary, a Catholic school in Independence, and with schools in the Center district; Lawrence; Kearney, Neb.; Maxwell, Neb.; Boise, Idaho; North Powder, Ore.; Baker City, Ore.; Morris County, Kan.; and the Cherow School District in Colorado.

Students in the districts will work with universities, museums, historical groups and the public to conduct on-site and on-line research on the westward expansion trails. They will communicate their discoveries by computer.

Greg Harlan, primary author of the grant, said the money will pay for computers, teacher training and evaluating the program's effect on student achievement. He said many schools were chosen because they have a strong vision for the use of technology but lack funds.

In Independence, "Project Whistle Stop" at the Truman Library eventually will give students all over the country access to

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historical documents.

Educators from Blue Springs, Lee's Summit and Platte County R-3 districts will help Independence develop a curriculum using the documents, and will maintain the library Web site. Other businesses and educators will be involved in the project.

"We felt that if we got more teachers involved it would give the project a broader perspective," said Independence Assistant Superintendent Marcia Haskins, who helped write the grant request.

LOAD-DATE: October 03, 1996

9
(Neb)
3RD STORY of Level 1. printed in FULL format.

Copyright 1996 Omaha World-Herald Company
Omaha World Herald

October 5, 1996 Saturday BULLDOG EDITION

SECTION: NEWS; Pg. 33SF

LENGTH: 277 words

HEADLINE: School Districts to Share Grant

BYLINE: MICHAEL O'CONNOR, WORLD-HERALD STAFF WRITER

BODY:

Four Nebraska school districts will share a \$ 4.4 million federal grant to buy computers and train teachers on using technology in the classroom.

"We're just elated," said Dean Bergman, an administrator with the Nebraska Department of Education, which helped get the grant. "It's going to have a tremendous impact." Teachers who receive training through the grant will train teachers in districts across the state, Bergman said. The grant money will be awarded over five years, starting with the current school year.

The school districts sharing the grant are Seward, North Platte, Morrill and Ainsworth. The grant money will be used to help all students in those districts but is particularly targeted at Hispanic, Indian, low-income students and rural students, said Ann Masters, a State Department of Education administrator.

Nebraska's two state-run centers for juvenile offenders, in Kearney and Geneva, also will share in the grant. Each center has its own high school.

About half the grant will be used to train teachers on using technology in the classroom.

"The technology doesn't do any good unless they (teachers) know how to implement it in their instruction," said Marshall Adams, Seward superintendent.

Ms. Masters said the rest of the grant will be used to purchase computer hardware and software and to pay for connections to the Internet. The aim will be to use technology in teaching all subject areas, from math and science to history and art.

The grant is among 23 awarded nationally through the Federal Challenge Grant program for technology. There were 600 applicants across the country.

LOAD-DATE: October 07, 1996

Seward, Neb., Schools Win Computer Challenge Grant

10

(Neb)

News

* Seward, Neb., Schools Win Computer Challenge Grant

AP

51 Words

596 Characters

10/04/96

The Omaha World-Herald

Bulldog

14

(Copyright 1996 Omaha World-Herald Company)

- * Seward Public Schools will receive a \$4.3 million challenge
- * grant from the U.S. Department of Education to develop the use of computer and Internet technology in the classroom.

Challenge grants are designed to help schools secure access to the Internet and use other online and educational technology in the classroom.

I0607 * End of document.

EDITORIAL

Editorials

TECHNOLOGY GRANT WILL GIVE STUDENTS AN EDGE/ THOSE WHO WOULDN'T
OTHERWISE HAVE HAD ACCESS TO TECHNOLOGY WILL HAVE IT NOW

339 Words

2460 Characters

10/07/96

Greensboro News & Record

ALL

A6

(Copyright 1996)

Twenty years from now, North Carolina will still be reaping
* benefits from the Challenge Grant for Technology in Education that
was awarded to a group of five school systems last week. With \$4.9
million in hand to introduce low-income children to the Internet
and other state-of-the-art technology, local educators can make
real progress at closing the divide between rich and poor students.

Guilford County, which spearheaded the project by writing the
grant application, will receive roughly \$3 million from the U.S.
Department of Education over the next five years. (Schools in
Person, Stokes, Surry and Wilkes counties will share the balance.)
The award is more than a feather in the administration's cap. It's
a real boon for the entire community. Our children stand to learn
skills they'll be able to use the rest of their lives.

In Guilford County, the money will be divided among 20 schools,
including inner city and rural facilities where the students are
unlikely to have access to a computer outside of the classroom. As
Schools Superintendent Jerry Weast said, this is significant
because poverty affects youngsters' education more than anything
else.

In fact, the impact economic disparity has on education led
James Comer, a nationally recognized education writer and professor
of child psychiatry at Yale, to criticize leaders across the
country. In his book, School Power, Comer noted that there has been
little effort to help students from disadvantaged families "keep
pace with scientific and technological development."

So, along with the other obvious benefits, this grant
represents an important step toward improving the lives of students
who might not otherwise have had these opportunities.

Numerous studies have already shown that computers are an

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effective way of encouraging and developing literacy. And through computer literacy, many students here will discover interests they never knew they had. That will help them become more prepared to enter the ever-changing job market, which already requires an aptitude for technology.

- This grant puts more Guilford County students on the right track. And not enough can be said for that.

I0607 * End of document.

GUILFORD GETS HIGH-TECH BOOST

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(NC)

GENERAL NEWS

GUILFORD GETS HIGH-TECH BOOST

PETER KROUSE Staff Writer

915 Words

6540 Characters

10/03/96

Greensboro News & Record

ALL

A1

(Copyright 1996)

The U.S. Secretary of Education is Richard W. Riley.

His last name was misspelled in a front page story Thursday.
(10/4/96)

A U.S. Department of Education grant will provide up to \$3 million for technology and programs to help disadvantaged students in Guilford County.

The drive to make Guilford County Schools a leader in computer-assisted education kicked into overdrive Wednesday.

The U.S. Department of Education has awarded a \$4.9 million * Challenge Grant for Technology in Education to a group of school systems led by Guilford County. The money will be used to introduce low-income students to the Internet and CD-ROM technology, and to create high-tech teaching tools.

Guilford County will be the largest beneficiary of the grant, with between \$2.6 million and \$3 million going to 20 elementary schools and to the system's technology center in Greensboro. The remainder of the funds will be spread across 15 schools in Person, Stokes, Surry and Wilkes counties. Programs developed at the Guilford Schools technology center will be shared with the other four school systems.

The grant is another feather in the school system's technology hat. The use of computers and the information highway in the classroom has been a major source of pride for school officials. It has also garnered national attention and praise for the system.

"I think what made the difference, we've got a proven track record," Superintendent Jerry Weast said.

Educators and government leaders from Washington and across the Triad gathered in Greensboro Wednesday to announce the grant, one of 24 worth a total of \$23 million handed out by the Department of

Education.

Guilford County wrote the grant application for the five counties that will receive money and will be responsible for doling out the funds.

"This is a historic day," said Weast, presiding over the announcement, which was made at the system's headquarters on North Eugene Street. The money will be used in urban and rural schools largely attended by children from low-income families.

"Poverty affects children," Weast said. "Poverty affects children more than any other factor we know in the education business."

The money will be paid out over five years. The first installment of \$1,152,475 was symbolically represented Wednesday morning by a giant check signed by U.S. Secretary of Education Richard Reilly. At Weast's urging, school officials and government leaders took turns posing for pictures around the check.

"It is an important and significant event for all of us," said Joe Johnson, superintendent of Wilkes County Schools.

Jackie Woods, representing the Department of Education, said Guilford County won the award because of the system's partnership with business; its commitment to use the funds to close "the diversity gap" between rich and poor students; and its goal to help poor-performing students catch up with their peers.

The grant will provide new computers and Internet access to 20 elementary schools in Guilford County, including Washington Elementary, where many of the students live in public housing and likely do not have computers, let alone Internet access, in their homes, school officials said.

One of those students is 10-year-old Dimonique Hicklin, who recently got hooked on the Internet after fiddling with a demonstration computer at Best Buy and accessing a home page about Apollo 13, the aborted flight to the moon.

"I want to go to the moon some day," Dimonique said while standing in a computer lab at her school. "I want to be the first kid to go to the moon."

Dimonique is hoping her aunt will buy her a computer for Christmas, but most students at Washington Elementary will not find computers under their Christmas trees, said Dawn McAllister, technology assistant at Washington Elementary.

Thanks to the grant, more students like Dimonique will, however, be able to use them at school. Now, only two computers at Washington Elementary have Internet access and only a few have the ability to operate CD-ROMs, which provide videos and graphics along with text.

"With the Internet, children will have more access to the world," McAllister said.

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Suzanne Bahr, a fifth grade teacher at Washington Elementary, believes many students will respond better to computers than they will to books. Plus, the more her students use better technology, the better they will feel about themselves. They will think, "if I can work a computer, I'm smart," she said.

Over time, all participating schools will receive new computers connected to the Internet and be able to hold teleconferences with other schools. However, a major part of the grant program will be the work done at the Guilford County Schools Technology Center on Prescott Street, said Michael Parrish, the system's distance learning coordinator.

Among other things, the grant will provide funds for the development of customized CD-ROMs that teachers can use in their lesson plans to better reach students. For instance, a student from a farming family can learn his algebra as it pertains to raising pigs, Parrish said. Also planned is an information network that will allow teachers across the state to share lesson plans, he said.

Weast said the grant will not change any of the appropriations in the Guilford Schools' budget, but will save the county from applying new funds to computer technology down the road.

RECIPIENT SCHOOLS

The following Guilford County Schools will receive new
* computers and Internet access through a federal Challenge Grant for Technology in Education.

Alderman Elementary
Allen Jay Elementary
Cone Elementary
Fairview Elementary
Foust Elementary
Hampton Elementary
Hunter Elementary
Jesse Wharton Elementary
Johnson Street Elementary
Jones Elementary
Kirkman Park Elementary
Montlieu Elementary
Oak Hill Elementary
Oak View Elementary
Parkview Elementary
Peck Elementary
Rankin Elementary
Union Hill Elementary
Washington Elementary
Wiley Elementary

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16
(PA)

October 4, 1996, Friday, SOONER EDITION

SECTION: STATE, Pg. B-3, SOUTH

LENGTH: 174 words

HEADLINE: SCHOOL GROUP GIVEN \$ 2.5 MILLION

BODY:

The Greene County Technology Consortium has received a five-year grant of \$ 2.5 million from the U.S. Department of Education. This year's installment of \$ 767,287 was awarded this week.

The consortium consists of Greene County's five school districts, the county vocational-technical school and Waynesburg College.

A goal of the program is to establish a computer link among schools in county. The link would enable them to set up video classrooms and to have Internet and e-mail capabilities.

Another objective is to give students background in computers and telecommunications that would prepare them for college, the workplace or advanced technical training.

The Greene County award was one of 24 challenge grants for technology in education given to school districts in 16 states. The grants range from \$ 300,000 to \$ 1.5 million a year for five years.

The recently approved federal budget provides nearly \$ 57 million for technology grants for the next year. The appropriation for 1996 was \$ 39 million.

GREENE COUNTY

LOAD-DATE: October 9, 1996

SCHOOLS GET \$1.5 MILLION FRANKLIN COUNTY WINS...

17

(V A)

DOCUMENT 20 OF 26

RNKE9627800024

VIRGINIA

SCHOOLS GET \$1.5 MILLION FRANKLIN COUNTY WINS FEDERAL GRANT

TODD JACKSON STAFF WRITER

339 Words

2336 Characters

10/03/96

Roanoke Times & World News

METRO

C-1

(Copyright 1996)

What locality would come to mind if you were asked about technology in Virginia's public school divisions?

Someplace south of Roanoke maybe, like Franklin County?

The small, rural school division took a major step Wednesday toward its goal of better preparing students to become the work force of the future.

The county school system has been awarded a \$1.5 million grant from the U.S. Department of Education to integrate computers and other technology into its curriculum at every grade level.

Franklin County was one of only two school divisions in the * state - Norfolk was the other - to receive the Challenge Grant monies. Only 24 of 586 applicants nationwide were awarded the grants, which totaled \$23 million.

The county applied for the money last year, but was turned down. A team of grant writers, including communications director Betty Blair, instructional specialist Tammy McGraw and communications specialist Cynthia Taylor, revised last year's application and submitted it again.

Blair said the 1995 application wasn't comprehensive enough - that it failed to present a plan benefiting all grade levels.

The 1996 plan did, and the team's work paid off.

The county will receive five annual installments starting this year that add up to the \$1.5 million.

"I think it helped that we were realistic in what we asked for considering our size," Blair said. "We're happy. A chance like this doesn't come along often."

By comparison, Norfolk, a much larger school system, will receive a total of \$5.9 million in grant funds over the next five years.

The grant is especially meaningful this year to Franklin

County. In April, the school system broke ground for its innovative Center for Applied Technology and Career Exploration.

The center, to be located off North Main Street in Rocky Mount, will use a technological curriculum to steer students toward a career path as early as the eighth or ninth grade.

The \$6 million center is scheduled to open next year, and some * of the Challenge Grant money will be used for its staffing and equipment.

I0607 * End of document.

**METRO SCHOOLS RECEIVE \$5M GRANT FOR
TECHNOLOGY BOOST**

by Lady Hereford

For some seventh graders at J.T. Moore Middle, computers are a routine part of science class.

But thanks to a new U.S. Department of Education grant for Metro's School for Thought Program, computers and new technology will become a regular part of other classes at Moore as well.

"We're hopeful that next year we'll be able to expand to the science department of the eighth grade, and we'd like to see it move into the social studies classes," said Jeff Darby, a seventh grade science teacher trained in the Schools for Thought method.

Metro schools have won a \$1 million grant from the U.S. Department of Education that will be combined with matching contributions from area businesses to provide more computers and technology for elementary and middle school students.

The Department of Education announced today that Nashville is one of 24 school districts in 16 states that received Challenge Grants for Technology in Education to prepare students for learning in the next century.

Each year for the next five years, Metro will provide a grant ranging from \$805,000 to up to \$1.3 million. The total grant will be more than \$5.1 million.

With the grant money, the school system plans to expand the Schools for Thought program, a three-year partnership between Metro Schools and Vanderbilt University to help students use computers to improve their achievement in mathematics, science and literacy.

"The goal of Schools for Thought is to have a quality educational reform effort that prepares students with the problem solving and technological skills they need to be successful in the 21st century," said Esther Swink, director of library, media and technology services for Metro Schools.

About 94 Schools for Thought classrooms will receive at least \$20,000 in instructional hardware and software, student achievement assessment services and professional development for teachers.

Among the additions to classrooms will be:

Six to eight computers.

Internet access.

Computer networks.

Multimedia equipment including CD-ROM and videotape capabilities.

More...

NASHVILLE, continued...(2)

About 20 classrooms a year will receive the equipment.

Although each school in Metro will soon have Internet access through one computer in the school's library under a statewide initiative called ConnectEN, the Schools for Thought will have access from the classroom, Swink said.

Darby said he was especially pleased about having Internet access. "We're sure excited about anything to further the program."

Other Metro schools are expected to benefit as well. All 25 middle schools are expected to participate in the Schools for Thought over the next five years, and at least a third of the 67 elementary schools will have literacy and math programs.

To supplement the federal grant, more than 30 local and national organizations joined Metro Schools in its grant application this summer and will contribute more than \$40 million in funds and services over five years.

Among the participants are Peabody College, Vanderbilt, the Nashville Area Chamber of Commerce, Thompson Communications, Turner Broadcasting, Speer Communications and BellSouth.

One partner is the Coalition for Goals 2000, a grass-roots reform organization based in Washington, D.C. One of the coalition's initiatives is an education reform on-line computer network called Goal Line.

The coalition is giving Goal Line accounts to the Schools for Thought with some free on-line time, and "a private place on this education reform network where we can post information about what's going on in Nashville," says Leslye Arsht, president of the coalition.

The Schools for Thought program is presently in nine Metro Schools: Carter-Lawrence, East and Moore middle schools; and Neely's Bend, Whitsitt, H.G. Hill, Tom Joy and Kirkpatrick elementary schools.

The program will be expanded to Pearl-Cohn High School. Also, two schools, Carter-Lawrence and Rose Park Elementary, will become Schools for Thought magnet schools, which fits in with the Metro Board of Education's Commitment to the Future plan.

The Commitment to the Future is Metro Schools' education plan designed to improve achievement while maintaining desegregated schools and shortening school bus rides where possible. The plan calls for the addition of several new magnet schools.

More...

NASHVILLE, continued...(3)

Swink said eventually some students will be able to participate in Schools for Thought from kindergarten through eighth grade.

In addition to expanding the Schools for Thought, teacher development centers will be established to instruct teachers in the program's methods, which call for teachers to act as facilitators or guides to learning instead of just lecturers, Swink said.

Increased parent involvement is another facet. School officials say parents of Schools for Thought students must agree to spend a minimum of two hours per week assisting with instruction.

That can be done as a volunteer in the school," Swink said, adding that parents who cannot volunteer will be asked to commit to working with their children at home and documenting that work.

Swink said the impact of the effort will be far-reaching.

"I really do think this is the best educational reform effort I have ever seen."

FRANKLIN COUNTY SAYS CHEW ON THIS

22

(VA)

DOCUMENT 8 OF 26

RNKE9628200027

EDITORIAL

FRANKLIN COUNTY SAYS CHEW ON THIS

295 Words

2004 Characters

10/05/96

Roanoke Times & World News

METRO

A-7

(Copyright 1996)

* WANT TO take a college course that, say, is offered only by Virginia Commonwealth University in Richmond? If you live in Franklin County, no need to go the distance. The course may soon be offered at the county's high school or at its new Center for Applied Technology and Career Exploration, due to open next year.

Such "distance learning" opportunities will be coming the way of rural Franklin County, thanks in part to smart educational leadership in that county, and now also to a \$1.5 million federal grant just won by the school division to advance its innovative high-tech teaching and learning.

Franklin's was one of only two public-school districts in * Virginia (the other was Norfolk's) to win a federal Challenge Grant for Technology in Education this year. It was one of only 24 in the nation, out of 586 school systems that applied for the funds.

Some may be surprised that Franklin, once viewed as a backwater county that specialized only in moonshine and chawin' tobacco, is getting national recognition for sophisticated educational initiatives. We're not surprised. Schools Superintendent Leonard Gereau and others have been tireless in promoting efforts to blend technology with academics in the classroom, and higher standards with community support in the county. County schoolchildren and residents already have benefited, as may other rural school divisions that keep an eye on what Franklin is up to.

* **BILL CLINTON** continues to show signs of weakness when it comes to the military. The 1997 defense budget, just signed, is \$11 billion higher than the administration requested. Republicans in Congress loaded up the bill with weapons and pork that the Pentagon hadn't asked for, in effect daring the president to veto it and be called soft on defense. Clinton flinched, of course.

I0607 * End of document.

23

(WA)

\$7.3 MILLION GRANT TO FUEL SCHOOLS' HIGH-TECH GOALS -- U.S. MONEY TO FUND NEW AND EXISTING PROGRAMS FOR KIDS IN SEATTLE DISTRICT

MARC RAMIREZ

SEATTLE TIMES STAFF REPORTER

269 Words

2193 Characters

10/02/96

The Seattle Times

FINAL

B3

(Copyright 1996)

The Seattle School District's techno-dreams got a significant boost yesterday with a \$7.3 million grant from the U.S. Department of Education.

"Needless to say, we're overjoyed," said John Thorp, the district's service integration director. "That's considerable money."

The grant, to be made in varying installments over a five-year period, will fund several Seattle programs, including curriculum revision at four district schools, high-school certification for employment in the software industry, and parent education.

Seattle is one of 24 districts in 16 states to receive the

* Challenge Grant for Technology in Education.

In all, the Department of Education sifted through more than 500 applicants to award \$23 million in grants. The awards range in size from \$300,000 to \$1.5 million annually for five years.

Seattle's award was the second highest overall, eclipsed by a \$7.4 million grant designated for Hudson Public Schools in Hudson, Mass.

The Olympia School District also received a \$3.7 million award for its Generation WHY (Worldwide Horizons for Youth) project.

Seattle Schools will work with Boeing, Seattle Community College, Microsoft and other regional software players to develop a high-school curriculum that will allow students to achieve certification before graduation.

The funds also will augment existing parent technology programs at various schools and allow the district to operate a mobile technology lab for computer literacy training.

Curriculum changes are planned at Van Asselt and Hay elementary

schools, Southshore Middle School and Ingraham High School, Thorp said.

The recent U.S. omnibus budget agreement provides nearly \$57 million for technology challenge grants in the new fiscal year - a substantial increase from the fiscal year 1996 appropriation of \$38 million.

I0607 * End of document.

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(WA)

NEWS

SEATTLE SCHOOLS GET FEDERAL GRANT

P-I STAFF

142 Words

1195 Characters

10/03/96

Seattle Post-Intelligencer

FINAL

B2

(Copyright 1996)

The Seattle Public Schools received the first installment
* yesterday of a federal challenge grant that could bring the district \$7.3 million over the next five years to strengthen technology education, academics and community access to technology.

Seattle was one of two Western Washington school districts
* awarded a challenge grant yesterday. The Olympia School District received the first-year portion of a \$3.7 million grant.

The Seattle award represents only a fraction of the \$75 million technology levy local voters turned down in February.

But, with Olympia, Seattle became one of only 24 communities
* across the nation to receive the challenge grant. More than 500 school districts applied.

Seattle officials said the money will be used for a variety of programs, including teacher training, the integration of computers and technology into the instructional process, and computer literacy training for parents and other community members.

I0607 * End of document.

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Senate

SENATOR MOSELEY-BRAUN AWARDS \$4 MILLION GRANT TO KIRBY SCHOOL DISTRICT 140

CAROL MOSELEY-BRAUN

408 Words

3188 Characters

10/02/96

Government Press Releases by Federal Document Clearing House

PRESS RELEASE

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For Immediate Release Contact: Joanna Slaney

October 2, 1996 202-224-8538

SENATOR MOSELEY-BRAUN AWARDS \$4 MILLION GRANT TO KIRBY SCHOOL DISTRICT 140

TINLEY PARK -- U.S. Senator Carol Moseley-Braun (D-IL) Wednesday presented Kirby School District 140 Superintendent Arnold Drzonek with a * \$3,992,104 million Challenge Grant Award in from of an enthusiastic audience of students, teachers, and parents at the Prairie View Middle School in Tinley Park, IL. The Kirby School District will use the grant to implement a project called "Reality-Based Learning", in which students and teachers from nine schools will act as consultants to solve real-world problems, generated through partnerships between business, students, teachers, government, community, and higher education officials.

"Today, I am proud to present you with a \$4 million, 5 year grant from the United States Department of Education that will turn this partnership of schools, businesses, and community leaders into an effort that will improve the quality of education so that this school, and the others in this partnership, can serve our children into the 21st century," said Senator Moseley-Braun.

"Today, the Prairie View Middle School, the Kirby School District, and eight other school districts, began a partnership that will connect students, teachers, and private-sector to enhance learning through real-world experience," she stated.

"The rungs on the ladder of opportunity in America are crafted in the classroom -- both for individuals and for our collective economy. Today's ladders much include computers and information technology. Many of our schools, however, do not reflect this new reality," said Senator Moseley-Braun.

The Department of Education today also awarded a \$3,499,868

*** Challenge Grant to Pekin Public School district #108. This grant will**

leverage additional funds for "Learning Community 2000," a partnership to strengthen civics education by linking students and teachers with national researchers as apprentices in the study of government.

"Learning Community 2000 will support community based centers for students and parents to access the technology and continue their studies beyond the confines of the typical school day.

* "Illinois' first Challenge Grant, awarded last year for the Waukegan schools, has proven highly successful and beneficial for the students. I am proud that thousands more Illinois children will be given the opportunity to access education technology.

On Monday, Congress quadrupled funding for education technology. The omnibus appropriations bill, passed by the Senate and signed by the

* President Monday night, increases funding for the Challenge Grant program by \$19 million, and appropriates \$200 million for President Clinton's Technology Literacy Challenge Fund.

I0607 * End of document.