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PREPARING OUR CHILDREN FOR THE **NEXT CENTURY**

RIPON QUARTERLY

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social (in) security

A front-running legislative priority currently shaping much of the partisan rancor that normally characterizes Congress is the Social Security debate. The President hopes to simply save Social Security in a ballyhooed pitch to baby boomers who might consider an Al Gore White House. How to do it? - easy, claims White House experts: earmark that fat budget surplus everyone is talking about and make it into a Social Security life preserver. Clinton plans to funnel, over a 15 year period, nearly \$2.7 trillion of a projected \$4 trillion government surplus into the Social Security retirement income fund. Twentyfive percent of that surplus would go towards a stock market investment scheme controlled by the federal government. An additional 11 percent of the surplus will help form federally-subsidized individual retirement accounts.

Congressional Republicans, of course, express extreme discontent with the Clinton Plan, claiming the White House lacks vision and comprehension. A government-run, government-regulated and government-subsidized Social Security investment fund can potentially lead to rampant insider trading. The massive, anticipated surplus should go to taxpayers, thereby privatizing the current system and allowing individual investment in private savings accounts.

Yet, current projections show Social Security will become obsolete in 30 years. Observes Michael Tanner, Director of Health and Welfare Studies at the Cato Institute in an article entitled "Social Security Privatization and Economic Growth": "Americans understand that the Social Security system will start losing money by 2012 and will be completely insolvent by 2029. The rate of return for young workers grows steadily worse. Indeed, most young workers will receive a negative return on their Social Security taxes — less than they paid in."

Tanner raises a cogent point. Why then, should we even expect anything from the current system? And, since very few Americans have faith in the present system and do not expect its long-term survival, why even propose keeping it? Why not implement an alternative?

The fate of Social Security is significant since it ultimately determines the financial stability of millions of Americans. Do we preserve the current system through spending an expanded surplus? Or do we re-evaluate the meaning of retirement by providing opportunities through private investment accounts? And if privatized, will safeguards be established to protect and educate average Americans through the complex world of market investments?

Perhaps opposing sides should consider the benefit of individual choice by offering privatization as an option rather than an absolute replacement. Through moderation and gradual implementation of investment opportunities determined by a choice-driven mechanism, in due time the citizen decides what is in their best interests. Not all individuals feel safe by investing. Hence, they can opt for the traditional system. If there are individuals willing to invest, then such an option can be provided. In addition, they can also choose a combination of the two approaches, or a government sponsored retirement account. If the argument supporting privatization presumes a condescending government is underestimating the intelligence of common people suited to make individual choices, then why not offer both privatization and the current system as choices, thereby letting the individual decide his or her own economic fate?

In terms of preserving the existing system, one must consider recent projections indicate the current system's projected insolvency. Therefore, why should the current generation and their children expect a return from the system as it is? We believe Social Security is important, but it would be most strategic for Americans to look beyond it as the sole source of retirement. The real solution is economic empowerment. There must be a broader, consistent focus on long-term economic security established through savings, investment and entrepreneurial initiative.

the fifth estate ...

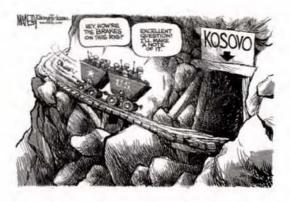
by Jeff MacNelly





















Spring 1999



"Upon the subject of education, not presuming to dictate any plan or system respecting it, I can only say that I view it as the most important subject which we as a people can be engaged in. That every man may receive at least a moderate education, and thereby be enabled to read the histories of his own and other countries, by which he may duly appreciate the value of our free institutions, appears to be an object of vital importance ... "

- Abraham Lincoln

(mis) education ...?

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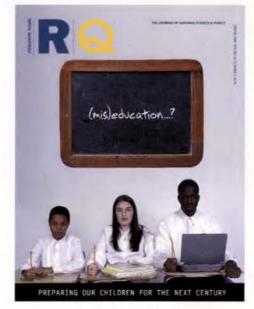
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With this issue, the old Ripon Forum takes a step forward with a new name, a new look and a new format. It also takes a step backward — a return to its roots — to focus on policy issues of greater substance and real practicality, The Society will seek the best ideas it can find. The Quarterly may challenge leadership collectively, but its purpose is not to criticize individuals. However, we are editors, not censors. Inevitably, our authors may agitate some readers. When that happens, we will appreciate your constructive criticism, too.

capitol grille . . .

An Interview with the Ripon Society's National Chairman

by Paul Peter Jesep

ongressman James C. Greenwood (R-PA), Chairman of the Ripon Society, left little doubt in an interview that the Republican Party's moderate wing has a clear, pragmatic and compassionate Lincolnian vision for the country.

Moderate or centrist Republicans are often misunderstood. Dogmatic conservatives label them indecisive. Some voters have a misunderstanding that they want ideological "moderation." Others think they are "in the middle" on tax policy, social programs and individual rights. Although their philosophy is clear, moderates as a whole don't market their principles in the same spirited manner as hard-nosed conservatives.

"I don't have moderate views, but very strong views," said Greenwood at his Washington office. "I define a Republican as one who [supports] individual liberties. Moderate Republicans are consistent in that they stand for those freedoms even when it comes to abortion or sexual orientation. In contrast, "there are Republicans who lose their libertarianism when it comes to certain social issues."

According to the Ripon Chairman, "Most moderate and conservative Republicans are clear on the new federalism — as a party we tend to believe that government closest to the people is [best]. Moderate Republicans are not in favor of expanding the federal government."

But moderates do believe that a carefully controlled government can play a positive role in helping people. "On environmental issues," observes Greenwood, "moderates are for strong environmental protections and it is only the federal government that can provide such protection. We believe in states' rights, [but] in a lot of areas states can not adequately control air pollution or clean water."



Throughout his legislative career, Greenwood proved that government can be both compassionate and fiscally prudent. During his tenure in the Pennsylvania State Senate, he voted for every tax cut and against every tax increase. At the same time, he underscored the utility of government by passing laws to protect children, limit teacher strikes, clean the environment and expanded medical emergency services.

Greenwood is particularly proud of the "Trauma Assistance Foundation, which set up a whole structure of trauma centers in Pennsylvania. There are a lot of people alive today and in pretty good shape," he reflects, "because of that specific legislation."

In Congress, he is a member of the "Tuesday Group," a primarily moderate gathering. "A lot of us are pro-choice, but not all of us. Nearly all of us support family planning, We coalesce on environmental issues. Those are the two major fault lines in the House — abortion and environmental issues. When we vote as a block we are effective in preventing the right-wing of the party from capturing the agenda. We are a group that has to be reckoned with."

Historically, moderates have consistently distinguished themselves by carefully using government to further social ends. In the 1960s, moderate Republicans like U.S. Senator Margaret Chase Smith of Maine, insisted that the federal government intervene to end racial segregation. Conservatives like Barry Goldwater, while despising segregation, argued that it was an issue for the states to resolve. In the 1940s, GOP presidential nominee Thomas E. Dewey chided conservatives like U.S. Senator Howard Taft of Ohio for their social Darwinism. And even earlier, Theodore Roosevelt championed the progressive movement that used government to protect everything from the environment to children in textile mills.

Nationally, Greenwood, a former social worker for mentally retarded and emotionally disturbed adults and children, sees great potential for the Ripon Society, a centrist-oriented research and public policy organization, in "changing some of the misconceptions about moderates being Republicans in name only." [The Society] can "put more passion in the message and constantly reiterate that being a social libertarian is a darned Republican thing to be."

In true moderate tradition, Greenwood is an innovative problem solver. Abortion, for example, divides the party. "Finding common ground and building bridges is critical work for moderate Republicans," he said.

"At least once a year I address a large group of anti-abortion advocates. It is usually a contentious gathering," according to Greenwood. "At the end of each one of those meetings, I say, 'We have a strong difference of opinion about what the law should be, but we really don't have a difference of opinion on whether there should be more or fewer abortions. There ought to be fewer abortions. Almost every abortion represents some kind of tragedy—lack of education [or] lack of available planning services.

I would love to work with any of you towards that shared goal."

"Last summer," noted Greenwood, "a Republican committeeman from my district took me up on that proposal. He and I co-chaired the [Pennsylvania] Bucks County Abortion Reduction Task Force. He invited anti-abortion advocates and I invited pro-choice advocates. We meet once a month. It's been a great experience. It's a rarity for those folks to sit around a table like this. Everyone recognized that no one had horns."

"We think," he added, "that the most successful thing we could do is to help bring mentoring programs into high schools, especially for at-risk girls. There are some models out there [to use]."

Re-building big tent Republicanism is another area where he hopes to work closely with conservatives. "One message that the Ripon Society can deliver is that if we don't nominate a viable candidate we will face four to eight years of Al Gore. Look back on our Democratic counterparts and remember how extremism in their party, particularly at the congressional level, pushed them into the minority. If we don't have a big tent," he adds, "we won't be in the White House and we won't be a majority in Congress."

Independent of internal party struggles, Greenwood voted for two articles of impeachment against President Clinton. "It was the toughest governmental position I've taken in over 18 years. It was a close call. It was clear that the president perjured himself. The facts are clear that the president attempted to obstruct justice. The hard question was did it rise to the level of impeachment. The House did the right thing."

"There are a lot of folks who say the well is poisoned between Republicans and Democrats because of impeachment." Greenwood disagrees. "There is a commonality of interest. The President has less than two years left. He will be very desperate to put a few paragraphs in the history books to counter balance the impeachment paragraphs. He'll want to get things done. [And] Republicans need to get a robust legislative agenda accomplished. There is a mutuality of interest that can surprise a lot of people."

Greenwood will be 48 years old this May and his legislative career is likely to continue for many years. But when the time comes to look back he says, "I hope, as my children grow older and become aware that I was away more than most Dads, that they say he did it for us. 'He made our country stronger.' 'He made the world safer.' And also that people say he helped to keep his party in the mainstream of American politics. He helped to make it a bigger, broader party."

Paul Peter Jesep, a Portsmouth, New Hampshire resident, is a member of the National Executive Committee and serves as New England Chapter president for the Ripon Society, a Washington, D.C.based centrist-oriented public policy and research organization.

cloakroom . . .



It's Back to Basics for Federal Education Policy

by Rep. Bill Goodling (R-PA)

espite the buzzwords, trends and fads that often emerge in our nation's education debates, the terms that have the greatest meaning are the basic ones: quality programs, better teaching, accountability, local control, dollars to the classroom, basic academics, and parental involvement. These concepts drove more than two dozen House Republican education accomplishments in the last Congress and they will drive Republican initiatives again.

With education high on the minds of many Americans, the education debate in the U.S. House of Representatives will be lively. Legislation will come from all quarters and there will be calls for many new federal programs to solve just about every problem in our schools — real or imagined. (Never mind that we already have literally hundreds of federal education programs spread across 39 federal agencies.)

The overwhelming number of federal programs and tens of billions of dollars in taxpayer funds beg two questions: Do federal education programs work? And why, despite hundreds of programs and billions of dollars, have the education achievements of our children dropped significantly over the last 30 years? As Alice said shortly after she entered Lewis

Carroll's strange Wonderland, things are getting "curiouser and curiouser." If new federal programs were the answer to our problems in education, the 800 programs on the books would have solved them a long time ago.

President Clinton is on the right track with some of his new education ideas, but I doubt whether he can implement any of them without deeply extending the federal reach into our local schools. The President has come around to Republican education ideas such as accountability, a ban on social promotion and rigorous teacher performance exams. Just a few short years ago these ideas were heresy to Democrats — and they still may be to some Democrats in Congress — in the same way that welfare reform had been.

The President's challenge now is to implement these new initiatives without directing them from Washington. To my dismay, the President's press releases on these initiatives consistently use the word 'require' in describing what states and communities must do to meet the criteria for these initiatives. It is clear that the President's new initiatives will be heavily regulated and directed from Washington.

Under the President's proposals, Washington bureaucrats will call the shots for most of the major issues confronting



states and local school districts. In exchange, the federal government will send them 8 percent of their funds, which is the average proportion of federal dollars in local school budgets. What a deal. As a former governor, President Clinton should know better.

If the President wants his new education initiatives he will need to veer away from micromanagement and steer a course toward flexibility for the states. The accountability agenda the President is talking about won't succeed if it is directed from Washington. However, it can succeed if Washington instead provides financial incentives for the states to create new accountability systems.

These debates will be framed this year within the reauthorization of the Elementary and Secondary Education Act (ESEA), an expansive federal law created in 1965 to provide educational assistance to disadvantaged children.

Today, ESEA is the Grand Central Station of K-12 federal education programs. It includes dozens of programs and thousands of regulations. The act includes programs dealing with safe and drug free schools, teacher training, magnet schools, education technology, bilingual education, testing and on and on. In this fiscal year, ESEA programs are funded at \$13.9 billion. Since the mid-1960s, the federal government has spent more than \$100 billion on ESEA grants and programs. Before our journey through the looking glass becomes even curiouser, we need to get back to the basics and build them into the act.

During the ESEA debate, I will spend considerable energy looking for ways to direct federal dollars toward creating quality teaching in our classrooms. Before coming to Congress, I spent 22 years as a teacher, principal, superintendent and school board president. I know that nothing matters more in the classroom than having a competent, well-trained teacher who teaches the subject he or she was trained to instruct. We can do more to help better prepare future teachers and retrain existing ones. The 105th Congress started on this course by passing three key pieces of Republican legislation — The Reading Excellence Act, The Higher Education Act and Head Start — that will direct federal resources toward helping teachers receive more professional development. As part of the continuing debate, we may also examine teacher tenure and teacher competency testing.

Our ESEA debate will also look at cutting federal education regulations and providing more flexibility to states and local school districts. Washington doesn't know best and Congress shouldn't serve as a national school board. We need to respect the educational diversity of our 50 states and the close to 16,000 school districts that operate therein. We should give our educators the regulatory flexibility to shape federal education programs in ways that work best for teachers and children — not bureaucrats at the U.S. Department of Education. Flexibility also means providing more federal incentives for the establishment of new charter schools, which we did in the 105th Congress and which can be accomplished within ESEA.

The 106th Congress will send more dollars directly to the classroom. We started on this course last year when the House passed the "Dollars to the Classroom Act," which was designed to consolidate 31 federal education programs and send \$800 million in bureaucratic savings directly to local schools. Unfortunately, the Senate didn't act on this bill before Congress recessed last fall.

Dollars to the classroom also means making good on the federal special education mandate. Twenty-three years ago Congress passed the Individuals with Disabilities Education Act (IDEA), which ensures that all children receive a free and appropriate education. But, the federal government has never paid its promised 40 percent share of the mandate. Instead, for many years it paid less than 8 percent of the excess costs of educating special needs children. Washington pushed nearly the entire burden on local school districts. This unfunded mandate has therefore robbed local schools of billions of dollars of their own funds.

Last fall House and Senate Republicans directed an additional \$510 million to help pay down the IDEA mandate. In fact, Republicans have increased funding for IDEA by \$1.9 billion since becoming the majority. Meanwhile, the Clinton Administration recommended cutting IDEA funding while proposing more than \$20 billion in new federal education programs. In 1999, look for Congress to again boost federal special education funding. Congress must honor the IDEA mandate, regardless of the Clinton cuts to special education. Moreover, this is money local districts could use to reduce pupil-teacher ratios and repair school buildings. They don't need federal programs and federal rules and regulations to help them do that - they only need special education money promised by the federal government. Education standards and testing will also figure into two debates in the 106th Congress: ESEA and the reauthorization of the National Assessment Governing Board (NAGB).

We should seek ways to help states and local school districts create high standards. However, at the same time, we must sharply limit any attempt from Washington to set national curricula. Over the past two years the Clinton administration has acted aggressively to set national curricula and impose federal tests in 4th grade reading and 8th grade mathematics. However, Congressional Republicans and Democrats moved decisively to forbid President Clinton from imposing national curricula and federal tests unless authorized by Congress. Americans want common sense education ideas from Washington - not more regulations, new federal tests, unfunded mandates and duplicative programs. Common sense and a back-to-basics approach - quality programs, better teaching, accountability, local control, dollars directly to the classroom, basic academics, parental involvement and responsibility - will guide education legislation from House Republicans in the 106th Congress.

Representative Bill Goodling (R-PA) is Chairman of the House Education and Workforce Committee

the edge . . .

Applying Thomas Paine's Philosophy in the 21st Century

by Paul Peter Jesep

Put a country right, and it will soon put government right.

Thomas Paine

he Unites States embraces a new century. But her reason for continued existence is unclear. Americans are politically and economically complacent. Many have a better appreciation of consumerism than liberty. Their infatuation with the British royal family exemplifies a perverted obsession with superficiality. It also underscores a misunderstanding of the republican form of government.

In the late 1700s, Thomas Paine penned a series of powerful pieces: The Crisis; Common Sense; Age of Reason; Rights of Man; and First Principles of Government, among other works, that must be revisited. While many of these works addressed the politics of the day their message remains timeless. In the eighteenth century, Paine gave meaning to such esoteric concepts as "liberty," "republic," "democracy," and "free expression." He conceived a uniquely American philosophy of freedom that changed the world.

In the 1900s, Whitman, Emerson, and Thoreau, influenced by the radicalism of Paine, further developed America's iden-



tity. They wrote in an age when the nation tripled in size reaching the Pacific Ocean. Great capitalists exemplified rugged individualism. Immigrants from every part of the planet flooded the streets of America making it one of the most culturally diverse nations in the world. The United States meant hope, opportunity, and most importantly freedom.

In this century, American ingenuity opened the Panama Canal while America's entry into World War I ended a massive conflict. Not long thereafter, the United States ended the horrors of Nazism. Because of American courage and determination Soviet-communism-totalitarianism ended. American innovation proved to us all through the space program that a great nation can not be limited by its border. Few nations have so positively impacted the world like the United States.

In 1998, however, a spiritual malaise covers the nation. What Paine wrote of Britain over two centuries ago can now be said of government: It has become "too [arrogant and indifferent] of America, to govern it justly; too ignorant of it, to govern it well; and too distant from it, to govern it at all ..."

Race and gender discrimination still thrive in a nation of immigrants now hostile to the new immigrants. Money corrupts elections and buys access to state and federal lawmakers. In the United States last year, over 2 million men, women and children were homelss. Indifference by a materialistic public allows a lecherous, scurrilous and unrepentant President to remain in office. Privacy and civil liberties are eroded modern technology and over-zealous religious conservatives.

Proponents of narrowly defined religious dogma like Ralph Reed and Gary Bauer seek to control government with elected officials who share their rhetoric regardless of judgement or qualifications. Increasingly, in a nation that only has two viable political parties, religious zealots use the Republican Party to gain access to government and impose a narrow definition of morality on a multi-cultural and religiously diverse nation. Now more than ever the wisdom of Paine is relevant. "I do not believe," wrote Paine in *The Age of Reason*, "in the creed by the Jewish church, by the Roman church, by the Greek church, by the Turkish church, by the Protestant church, nor by any church that I know of. My own mind is my own church."

Elected officials on the state and federal level no longer lead as opposed to public opinion polls that control their conscience. It's easier to tell complacent citizens — at least those who still take the time to vote — what they want to hear, rather than lead them in directions they must go. We elect men and women from both parties who only tinker with the machinery of government as they speak with over-used sound bites like "lower taxes," "less government" and "better schools for our children" because the public expects nothing more. Many elected officials are good intentioned, but they are hardly proactive visionaries willing to take chances for the approaching 21st century.

Yet, in positive retrospect, contractors build structures that reach toward the stars while farmers continue feeding over two hundred million citizens. Architects design majestic buildings that inspire us as artists create beauty for the eye and ear. America

is a mountain of progress moved by entrepreneurs who are the economic engine of the nation employing millions.

America is no longer a nation of laws. It is a nation choked with laws. There are few things from buying a house to establishing a business where a lawyer isn't recommended. And lawyers have helped to create a culture encouraging plaintiffs to sue for important matters to the absurd. They have furthered a system that encourages defendants in civil cases to settle regardless of negligence. Radical legal reform is needed for a fairer, simpler, and shorter legal system.

Internationally, the nation has failed to assert its secular morality to further human rights in China and the former Yugoslavia. China permits sweatshops and persecutes political activists who disavow communism. A slaughter of innocent civilians has persisted in the Balkans and America flexes relatively little beyond shuttle diplomacy and air raids. Piece-meal foreign policy is unacceptable for a nation with such power and a historic sense of justice.

What is the nation's purpose in the next century? Past glories or service to liberty in other parts of the world as evidenced by the fall of Soviet communism is not reason enough to exist. It would be immoral for a nation that draws its strength from such extraordinary cultural and religious diversity not to re-evaluate its past as it prepares for a new age. This nation has a duty to take its energy, strength, and optimism and make the plight of mankind better.

As Paine noted "... the true greatness of a nation is founded on principles of humanity." In the next century, more than ever, Americans should insist that the federal government lift the human spirit in the darkest corners of the nation and world.

In 1783, after the American Revolution, Paine wrote: "the times that tried men's souls are over the greatest and most complete revolution the world ever knew, gloriously and happily accomplished. Never, I say, had a country so many openings to happiness as this. Her setting out into life, like the rising of a fair morning, was unclouded and promising. Her cause was good. Her principles just and liberal ... everything about her wore the mark of honor." Up until recently, Americans could easily relate to the idealism.

Americans have allowed the Washington "Beltway" establishment to corrupt the nation's soul. The establishment must be turned on its head with an intellectual revolution. It must cause Americans to analyze problems with justice, fairness and compassion. It must be a revolution that lays out the nation's role in a new, more complicated and dangerous century. It must be a revolution that gives the greatest republic in the world a noble, honorable reason to continue its existence other than for its own sake. As the new century dawns, America can find meaning and inspiration with the timeless principles of Thomas Paine.

Paul Peter Jesep, a Portsmouth, New Hampshire resident, is a member of the National Executive Committee and serves as New England Chapter president for the Ripon Society, a Washington, D.C. based centrist-oriented public policy and research organization.



(mis) education ...?

This completely re-designed Spring '99 issue of the Ripon Quarterly highlights the continuing significance of education in American life. But, more importantly, RQ is concerned with the direction of education as we enter the next century. This is a most critical question considering education is the lifeblood and quintessential nourishment of a nation. Thus, in the interest of facilitating a much-needed forum addressing such crucial issues seated upon the doorstep of an uncertain millenium, RQ searches for answers to the following questions: How do we prepare our children for the rapid technological advancements expected for the 21st century? What are specific steps the nation — on federal, state & local levels — could take to meet these challenges?

(mis) education ...?

Educational Technology: A Necessity for the 21st Century — Why the Delay?

by Dr. John G. Watson

he information age poses a whole new set of challenges and questions to America's schools. The quality of our nation's political, social and economic future will depend on the ability of young people to become functioning members of society who understand how to access information (and determine its significance), manipulate data, draw independent rational conclusions and communicate findings. A democracy requires contributing citizens who are informed and capable of independent, critical thought.

Yet our schools continue to utilize teaching practices designed nearly one hundred years ago. The lock-step learning environment that endeavored to serve the needs of the industrial age is inappropriate for student preparation in the information age. Students today need a higher level of academic, technical, communication and information-processing skills in order to function effectively in society. The contemporary workplace requires that employees be adaptable, team players with strong problem-solving and decision-making skills. Schools will have to accommodate a variety of learning styles, interests and life experiences if they are to educate today's students. Leading experts have suggested that an organization's ability to learn, and to keep improving the way it learns, may be the ultimate competitive advantage. Continual retraining is becoming the norm in American business, but are future employees prepared to contribute? Our society's preparation of young people for the workplace of the industrial age has been insufficient.

In 1992 the National Alliance of Business released the findings of a study investigating how difficult it was for twenty-five hundred small business firms to find job applicants with basic skills. The results are alarming: 70 percent of the companies said applicants lacked writing skills; 61.8 percent said applicants could not do basic arithmetic; 64 percent indicated applicants could not listen or follow oral instructions; 59.2 percent reported applicants did not understand manuals, graphs, schedules, and other business forms; and 58.4 percent stated applicants could not speak well enough to be understood. Such findings are among the reasons educational reform has been a national priority for the past few decades.

While the nature and strength of our national economy is not the only driving force for school reform, it is a powerful one. Global competition, new technologies, scientific discoveries, change in production techniques and the re-engineering of work are all driving economic and social change. Peter Drucker has characterized this new economy as the "knowledge society." According to Drucker, the vast majority of new jobs will require "a good deal of formal education and the ability to acquire and apply theoretical and analytical knowledge."

If the educational reform movement of recent decades has demonstrated anything, it is that public education is not meeting its obligations to our youth. American children are not learning nearly enough in the core academic subjects. Furthermore, our schools have not adapted to the culture of the information age, a culture which values knowledge and technology as its key commodities. Educational reformers are proposing a number of new approaches to learning. The concepts of education and schooling are being expanded by exploring the value of ideas such as charter schools, magnet schools, distance learning, voucher programs and new governance systems. As for the individual classroom, reformers recommend higher academic standards, increased teacher expectations, back-to-basics curricula, technology, etc. The incorporation of technology into the learning process has been encouraged for over a decade, but exactly how to do that is still unclear. The business world could not function without cutting-edge technologies, so why are schools so slow in their adoption?

To the children of the 1970's and 1980's, "technology" could have implied a great range of ideas, from the specter of nuclear holocaust to fantasies of a 21st century embellished with flying automobiles and household robots. For today's children, the information age is already a reality. By the "click of a mouse" (a foreign phrase to the average citizen of the Reagan years), they are connected to the entire world. Yet many are incapable of accessing and utilizing this asset.

On March 31, 1994, President Clinton signed into law the *Goals 2000; Educate America* Act, designating eight national education goals. Secretary of Education Richard W. Riley believes that the quality of education envisioned in *Goals 2000* cannot be attained without the effective use of technology such as computers, CD-ROMs and access to the infor-

mation superhighway. Riley feels that "technology can help individualize instruction; support teachers and their professional development; connect students' learning to the real world; connect schools to the home and community; and extend learning beyond the traditional 9 to 3 school day." The use of technology is not an educational panacea. It is new instructional strategies and high standards of performance that cause improvements in achievement; technology is only a tool. But it is an important facilitator of education in the 21st century.

There are teachers and school administrators who fail to connect the importance of technology with the lives of young people. These educators offer a variety of reasons for not embracing the integration of technology into the curriculum - lack of funding; lack of time; lack of confidence in technology's role in the learning process; and lack of opportunity for professional training in the use of technology. The evidence demonstrates that technology is a tool that allows teachers to create child-centered classrooms, an environment where every decision will be made solely on the basis of how, and to what extent, it will positively influence student learning. Secretary Riley warns "[I]f we leave anyone behind, we will be ignoring the vast promises that these technologies represent."

Preparing for the Future

In an address at the National Governors Association Education Summit, President Clinton stated "...that the educational enterprise, which has always been central to the development of good citizens in America, as well as to a strong economy, is now more important than ever before." With excellence in education as a national priority, educators are assessing how new technologies can be harnessed to support evolving communication patterns and the student/teacher roles that are characteristic of the new teaching methods. These teaching methods allow students to investigate their questions in a number of ways, including the ability to traverse the "on ramp" of the information superhighway.

Learning is a complex process. We learn by building on past experiences; by trial and error; by starting with simple tasks and combining them over time to accomplish more complex tasks; and, by gaining insight and understanding of the relationship between various parts of a problem. Research demonstrates that "for teaching to be really effective, a learner must be able to create meaningful and personally relevant patterns." The process of learning must be maintained within a context of appropriate and challenging standards. Dr. Carolynn Reid-Wallace, senior vice president for education at the Corporation for Public Broadcasting, explains: "If our children are to realize the promise of American life, we must accept the premise that standards are the surest route to excellence. Parents and educators should inculcate that ethic of excellence in schools by raising standards of performance for both students and educational professionals." Higher expectations for students, teachers and educational systems are critical. Technology is a means of attaining a higher level of learning.

As the use of technology becomes more prevalent in our schools, there are significant environmental characteristics that ought to exist in order to maximize the benefits of educational technology. Jay Sivin-Kachala and Ellen R. Bialo, in their Report on Effectiveness of Technology in Schools, 1990-1994, note these characteristics:

- District-level involvement and a school-level computer coordinator are key factors in developing a school environment conductive to effective use of technology. Leadership and technical support are key elements to successful programs.
- Teachers are more effective after receiving extensive training in the integration of technology into the curriculum.
 School districts and teacher preparation programs must provide the incentive, time and support system for teachers to realize the benefits of technology and feel comfortable with utilizing it in the classroom.
- · Teachers should carefully plan, and ac-



tively participate in, learning activities that incorporate tool software. Being fully engaged in the learning process allows for better assessment and the ability to provide direction.

- Teachers should offer students selfdirected learning experiences and activities that encourage self-expression. Instructors must allow the student to pursue interests, develop understanding and communicate findings. Students need to be encouraged to be creative and explore their questions.
- Students benefit from personal interaction among class members. The
 development of teams provides students with the understanding of how
 one can enhance learning through
 healthy interaction and an exchange
 of ideas.

American classrooms are being transformed as the roles of teachers and students begin to shift. For the teacher, the evolving role encompasses individual student assessment and planning to maximize learning potential-a very time consuming, yet important task. Students are taking more responsibility for specifying and initiating some of the learning tasks, including teamoriented investigation. A new pedagogy, supported by a set of widespread classroom practices, is emerging that encourages individual and small group investigation of student-generated questions. The teacher becomes a consultant, guide and facilitator as students seek answers and develop skills. As a mechanism of accomplishing these tasks, technology becomes a most important asset.

Research on Technology

The rapid increase in government and business sponsorship of educational technology has led to numerous studies on the subject. The Sivin-Kachala and Bialo study recounts the findings of 133 research projects. Their review suggests several conclusions:

 Technology has a positive effect on student achievement (both in regular and special education) from preschool through high school.

- Technology has a positive effect on student attitudes towards learning and on students' self-concept. This is particularly true when technology allows the students to help direct their own learning.
- The introduction of technology into the learning environment can make learning more student-centered, encourage cooperative learning and stimulate increased teacher/student interaction.
- Computer-based learning leads to greater student cooperation, sharing and helping behaviors, thus preparing students for an economy that values and requires teamwork.

Educators are realizing the importance of fostering within students independent judgment, critical thinking and problem-solving skills. Student learning can be enhanced by tutorials and various communication technologies that allow the investigation of reallife issues confronting professionals. While complex, these teaching strategies provide the learner with authentic experiences and challenge personal exploration, resulting in student-directed learning with the teacher functioning as a valued resource and guide.

Technology can make the learning process more efficient without detracting from established educational objectives. Once the individual is proficient in the basics of reading, writing, computations and oral communication, then the learning experience can be further enhanced by calculators, distance learning, computer-assisted instruction using integrated learning systems, laser videodiscs, microcomputer-based labs, presentation software and telecommunications.

Frank Betts and Vicki Hancock, of the Education and Technology Resource Center at the Association for Supervision and Curriculum Development, find that the integration of technology into instruction provides very significant benefits. With more effective planning sessions and greater accommodation of different learning styles, teachers can focus on the needs of individual students. This emphasis also allows the teacher to establish developmentally appropriate expectations for each student, thus enhancing the individual's learning. These efforts find teachers orchestrating the learning rather than serving as the dispenser of knowledge. Classrooms can contain more collaboration and small-group interaction, allowing for a student-centered focus.

While educational technology includes numerous modes of delivery and support mechanisms, the computer is often a major component. Several researchers have investigated the impacts of computers on the learning process. For example, The Apple Classroom of Tomorrow (ACOT) project was launched in 1986 as a means of studying the influence computers have on learning in K-12 classrooms. After eight years of studying the computers' effects on classrooms, David Dwyer, Project Manager and Distinguished Scientist for ACOT, "observed profound changes in the nature of instruction, learning, assessment and the school culture itself." His findings are consistent with the research literature on the impact of computers on the learning process. The ACOT project dispelled many myths about technology and discovered that teachers adapted to computers easily; children tended to be more involved with cooperative learning rather than learning in isolation; student interest in computer use did not decline over time. Children, even the very young, did not find the keyboard a barrier to the use of the computer; and, software was not a limiting factor in the learning process.

Simply placing computers into classrooms is not going to change teaching and
learning. The training of teachers and students is essential. New ways of teaching
and developing critical thinking must be
invented. Project CHILD (Computer
Helping Instruction and Learning Development) offers a restructured framework
for technology integration in grades K-5,
encompassing the subject areas of reading, language arts and math. They found
that the amount of time required to coordinate and integrate instructional software
across all areas of the curriculum was over-

whelming for most. As a result, much classroom computer time was used only for games, remediation or enrichment.

The research confirms the advantages technology brings to the learning process. However, its availability and utilization are issues confronting educators. Among the more significant challenges is the day-to-day integration of these tools into the instructional process.

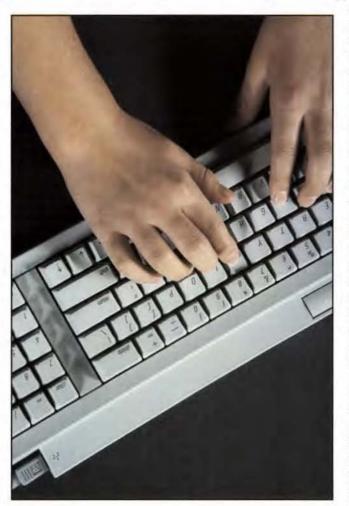
Challenges for Teachers

Training teachers to integrate 21st-century technology into the classroom amounts to an enormous undertaking. These professionals have been trained and socialized into a set of institutional norms and values that can too often be inflexible and reluctant, if not downright hostile, to change. Meanwhile, they are already inundated with lessons, homework, discipline problems and parent-teacher conferences. Some educators question the wisdom of investing vast sums of time, money and energy on technology, and many are intimidated by the new media. Some are even convinced that technology obstructs creativity and personal exploration. These concerns may be appropriate if technology is used to simply automate traditional methods of teaching. New technology gives teachers potential to create new models of teaching and learning.

While parents and communities stress the importance of

students having access to technology, it is a mistake to focus primarily on students. For the educational enterprise to adapt appropriately to our new world, we must invest in training teachers to integrate technology into the curriculum. School districts frequently use staff development opportunities to train their teachers to incorporate new technologies; this is a complex process. Traditional staff development training in technology involves a day's instruction, including hands-on experience with the software. Most of this training

ignores the developmental process of adults — the need to understand relationships, to reinforce concepts with frequent use, to explore and be challenged, and to conceptualize an entirely different teaching methodology. Districts rarely have support staff available to help the teachers work through these innovations. The combination of reticence, frustration, and inadequate training threatens to sabotage



the opportunities for technology to enhance classroom learning.

Overcoming technical, economic and psychological barriers requires leadership, vision and commitment. It can take five years for teachers to thoroughly integrate technology into their teaching. Researchers have estimated that the cost of training teachers may be far greater than the cost of hardware and software. The commitment to this training must be jointly shared by the teacher and the school district. It is an investment of several thou-

sand of dollars per teacher. The initial outlay of time, energy and money is frightening to a school system already strapped for resources, but the return on investment will be well worth the price.

Are Schools Ready for the 21st Century?

While incorporating technology in the learning process is becoming more and more

essential, access to the requisite equipment is limited. The United States General Accounting Office (GAO) surveyed a national sample of 10,000 schools and discovered that most do not have the support systems to maximize the learning process in the following areas:

Most schools do not fully utilize modern technology. Although at least three-quarters of schools report having sufficient computers and televisions, they do not have the system or building infrastructure to maximize the potential benefit of this equipment. Moreover, because computers and other equipment are often not connected to any other computers in the school or the outside world in a network, they cannot access the information superhighway.

Over 14 million students attend about 40 percent of schools which reported that their facilities cannot meet the functional requirements of laboratory science or large-group instruction even moderately well. Over half the schools report not having enough instructional

space to implement many effective teaching strategies. Not all students have equal access to educational resources. Overall, schools in central cities and schools with a 50 percent or higher minority population are more likely to have insufficient technological resources and a greater number of unsatisfactory environmental conditions — particularly lighting and physical security — than other schools.

This evidence of inadequate infrastructure, technical support systems and teacher preparation demonstrates that our schools



have a long way to go to meet the needs of students in the 21st century.

In her testimony before a sub-committee of the U. S. Senate, Linda G. Morra (GAO's Director of Education and Employment Issues) articulated a view of what a 21st century school might look like. Such schools would likely have:

- flexible space, including space for smalland large-group instruction;
- space to store and display alternative student assessment materials;
- facilities for teaching laboratory science, including demonstration and student storage space for chemicals and other supplies;
- a media center/library with multiple, networked computers to access information in outside libraries and information sources:
- high-quality computers, some with CD-ROMs, printers and computer networks for instructional use;
- · activated modems in instructional areas;
- television sets, laser disk players/video cassette recorders and cable TV;
- fiber optic cable, conduits for computer and network cables, electric wiring and power for computers and other communications technology.

Morra cites Stuyvesant High School, a New York City public school established in 1904, as an example of a school that effectively uses state-of-the-art technology. This is a magnet high school with an emphasis on science. In 1992 they moved into a new facility located at the northern end of Battery Park City in Lower Manhattan. Stuyvesant enrolls 3,000 students, has over 400 computers - most of which are arranged in 15 networks, with access to the Internet - and has four antennae on the roof to communicate with satellites. These students can directly access the latest information from the most sophisticated scientific satellites and participate in interactive "classes" with scientists in the Amazon rain forest via interactive, multimedia networks. Students talk to these scientists while observing them in the rain forest on their TV screens during class, allowing them to go on "virtual" field trips worldwide. Stuyvesant High School ought to become the new standard of excellence expected throughout the country. It is important to note that Stuyvesant is a selective school with as many as 16,000 applicants tested for 800 openings each year. One can only imagine the societal impact if this quality of educational experience were available to every student seeking the opportunity.

Another door that technology opens for students is the opportunity to explore real-life situations. In 1989, two scientists at the Lunar and Planetary Laboratory of the University of Arizona developed the Image Processing for Teaching project (IPT). IPT has taught thousands of K-12 teachers how to utilize this technology to enhance student understanding of physics, chemistry, biology, earth science and mathematics, using technology that scientists employ to create digital images of the Earth from space probes, and technology applied by physicians to manipulate images generated during CAT scans. Through the manipulation of a series of digital images students learn to use their own judgment and to follow intuitions and ideas; as a result, they find multiple solutions to actual problems. For example, a student at Rio Grande High School in Albuquerque, New Mexico videotaped himself doing jumps on his skateboard. Then, with the guidance of his physics teacher, the student analyzed the forces involved in the jumps. Technology can be used, as shown in the IPT project, as a tool to maintain student interest, simulate reallife situations and develop student skills in math, science, writing, oral communication, teamwork and critical thinking. Student interest remains focused as they use scanners, video cameras, the Internet, and digital stillcameras as technological tools, enabling them to work on complicated projects and learn important concepts.

Conclusion

The conviction that educational technology is important to the learning process is gathering support from leaders in government, business and education. They understand that American education can no longer afford to operate with a system designed in and for the industrial age. Information is no longer primarily in the minds of teachers and in books. Information is everywhere. Yet, our schools are large bureaucracies, institutions that adopt change slowly.

Thus, there are significant barriers that must be confronted.

As a nation we must be committed to providing quality education to our citizens. Each child needs to be positively encouraged and realize that with perseverance and hard work, goals can be attained.

Using technology to entrench existing teaching practices, in effect automating the status quo, would be a major mistake. The focus ought to be how technology can be applied creatively to enhance teaching and learning.

In addition, it is imperative to address the fears and concerns of teachers. Teachers must have opportunities to see new methods in action, realize their significance and be convinced of the tremendous benefit to children. Teachers need access to hardware and training. They need time to become familiar with how technology can enhance learning and how administrative duties could be accomplished more efficiently. Of significant importance is fulfilling the teacher's need to interact with others who are struggling with the same experiences.

Integration of technology into the curriculum ought to be interrelated with learning techniques that can improve student achievement. These strategies include: (1) Learning in a context that interests and challenges the student. (2) Learning by involvement in the process. (3) Learning by replication. (4) Learning by receiving immediate feedback on performance. (5) Learning by practicing different parts of the task separately and then incorporating them into the task as a whole.

A knowledge society requires citizens who are lifelong learners, people who explore and share ideas and benefit from the thoughts of others. Technology is a simple, yet integral means toward that end.

Teachers of the 21st century must be prepared to maximize the learning of all children; ready to share their knowledge and experience; ready to share their heart; and, dedicated to helping all children find success in their world. New technologies can help them do that. We can delay no longer.

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Technology Education Standards: Power, Peril & Promise

by Dr. Rodger W. Bybee

ur society is both largely dependent on and mostly ignorant about technology, a situation that should be cause for national concern (Atkin, 1990; Selby, 1993; Raizen, et al., 1995). Technology educators have the opportunity to develop standards and establish technology as a new basic in American education. Within the United States others groups, such as Project 2061 of the American Association for the Advancement of Science (AAAS) and the National Research Council (NRC), have included technology as part of their Benchmarks for Science Literacy (AAAS, 1993) and National Science Education Standards (NRC, 1996). As reported by Paul Black and Mike Atkin (1996) in Changing the Subject (1996) technology has emerged as a new field of study in many other countries.

The content of technology standards will have to be accurate and thorough. At the same time, the standards will have to be educationally sound; understandable by those who have to implement policy, programs, and practice; usable by teachers and school personnel; and achievable by students in elementary, middle, and high schools. The degree to which standards meet these criteria is the degree to which they will have power and promise of establishing the discipline of technology in school programs.

The Power of Educational Standards

The power of standards lies in their capacity to change fundamental compo-

nents of the educational system. This assertion has several key points. First is the capacity to cause or influence changes. To be clear, standards imply change, not an affirmation of the status quo. Second, the changes are in fundamental components of education, by which I mean curriculum content, instructional techniques, assessment strategies, and teacher education and professional development programs. Third, I refer to a larger educational system, as opposed to one component such as assessments. A feature of standards is that they influence the entire educational system by specifying outcomes, for which the concrete expression is - What should all students know and be able to do? In educational history, clarifying educational outcomes is a shift in emphasis. It varies considerably from our common emphasis of modifying inputs in hopes of improving educational outcomes. With reference to inputs we change, for example, time (length of school days, years), content (additional courses), materials (new textbooks or activity-based programs), and techniques (cooperative groups, project-based learning). These inputs are meant to enhance student learning and they may do that, but there is also the reality that to be optimally effective, all of the educational inputs have to be directed to a common purpose. If not, there is the significant possibility of uncoordinated and unfocused changes; for example, in textbooks and teaching techniques. It should not surprise educators that after establishing standards, which are policies, practitioners ask for instructional materials, educators ask about teacher education, evaluators ask for tests, and so on.

Implementing standards facilitates greater coherence among educational components. The assumption behind this position is that greater coherence will enhance student achievement. By some reports, for example, the Third International Mathematics and Science Study (TIMSS), we have an incoherent educational system. Goals are only tangential to instructional materials which are not true to assessments, which are not aligned with professional development, and the list goes on. Using a basic definition, coherence occurs when a small number of basic components are defined in a system, and other components are based on or derived from those basic components. There is an orderly and logical relationship of educational components that affords greater comprehension of the whole system. Over time, standards for technology education will develop coherence by:

- defining the knowledge and abilities of technology that all students should develop;
- presenting criteria for judging technology education content and programs at different grade levels including learning goals, design features, instructional approaches, and assessment characteristics;
- providing criteria for judging instructional materials, curricula, and learning experiences developed by national projects, state agencies, local districts, schools, or teachers; and
- · including standards for the preparation



and continuing professional development of teachers.

The Perils of National Standards

Release of the technology education standards in the spring of 1999 will inevitably broaden and deepen discussions about technology education in general and of those standards, in particular. Although the community will have been aware of their development and opportunities for review and input, the actual standards will stimulate new discussions as different factions of your community are confronted with the possibility of change. I wish I could report that these discussions will be calm, clear, and civil. Unfortunately, at best I can give you some warnings and suggest some strategies. The warnings build awareness and prepare for the inevitable criticisms. The strategies provide a plan that accommodates many, neutralizes some, and adapts to others.

Rather than convey a totally pessimistic warning of inevitable crisis and doom, I will present the perils as paradoxes. A paradox, as opposed to a dilemma, is a seemingly contradictory statement that may be true, an apparent contradiction that may in fact be resolved in time and through effective leadership.

Paradox 1: Individuals and groups will demand to know more about standards; yet, the more they know about them, the more inadequacies they will report. In the early stages of development individuals want to know more, but as they develop awareness they fail to see connections to their specific discipline, e.g., materials science, teacher education, and thus will claim the standards to be inappropriate or to not apply to them. My recommendation is to consistently send the message of what standards are, what they are not, and how they will influence and connect various factions of the technology education community.

Paradox 2: Individuals and groups will demand that standards bring about revolutionary improvement in technology education: yet, they will be reluctant to initiate change in their respective domains of technology education. You hear that there is a need for all citizens to under-

stand technology and that technology education should have priority in schools, but individuals will find numerous reasons not to initiate even small, incremental changes to achieve the goal. A clear example of this paradox is when college and university faculty demand changes in K-12 education but are reluctant to change their programs. You have to talk continually about the system and provide examples of changes in all components of the system: a "we are all in this and if it is going to work, we all have to change" approach.

Paradox 3: Individuals and groups will demand more specific and practical standards; yet, the more specific and practical you are the more you will hear about the need for broad and general standards. This paradox applies to just about everything. For example, some will want actual examples of instructional materials such as those from the National Science Foundation (NSF) and National Aeronautics and Space Administration (NASA). When you provide the example, there will still be requests for more detail, combined with misinterpretations and criticisms of the examples. Try to establish a context by indicating what the example does and does not show.

Paradox 4: Individuals and groups will ask for brief statements that express the standards; yet, any slogan you use will be taken to its most literal and unreasonable conclusion. "Less is more" is a theme commonly heard in contemporary reform. Critics, of course, take it to the extreme—teaching less and less about more and more until students know nothing about everything! This was never the intention of the originators of the phrase. Rather, they meant something like learning fewer concepts more deeply.

No doubt, Technology for All Americans (1996) will suffer similar criticism—
"You could not possibly mean ALL," critics will say. "What about severely disabled students?" The implication here is that if exceptions can be found, you should change the goal. Quite the opposite is the case. The exceptions demonstrate the need for the goal. Changes implied by the questions can open the door to a future of inequalities in technology education. I en-

courage you to not open that door, but stay with the slogan that will bring greater equity to our students and society. You can use "justice for all" as the counterpoint. That is, given that society embraces the goal of "justice for all", it is fair to ask if we can find exceptions. Of course, we can. So, should we change the goal or work harder to achieve it? The answer is clear —we keep the goal and strive to achieve it.

Paradox 5: Individuals and groups will want you to achieve the goals set forth in standards yet the more successful you are, the more you will be subject to criticism. With success comes criticism. Unfortunately, it is not always accurate, deserved, or civil. Recognize that standards for technology education will not be a perfect document, so critics will find errors and the need for improvement. Listen and learn from criticism that is clear, justified, and civil. When unjust and undue criticism comes, ignore most of it, respond vigorously and adequately to some of it, and have a larger vision than the critics. Also, it always helps to maintain a sense of humor.

Fulfilling the Promise of National Standards

In the project on National Science Education Standards, we developed a strategic framework for standards-based reform (referred to hereafter as the framework) (Burrill & Kennedy, 1997). Such a framework helps navigate the paradoxes, and it will help fulfill the promise of technology education. Figure 1 summarizes that framework.

Research on dissemination and change clearly indicates actions by many individuals and organizations are needed if meaningful and lasting changes are to occur (Hutchinson & Huberman, 1993). And, the larger the system (e.g., the nation vs. a school), the larger and more coordinated the effort needs to be. The framework provided in this section is intended as an organizing tool for standards-based reforms in education (Bybee, 1997).

Similar to many models for change and improvement, the framework has several different dimensions, each with particular goals. In the framework, the developer of the standards plays a role, as do other participants in the educational system. National organizations, such as ITEA, play a major part in initial dissemination of the national standards, but they do not implement them. The framework helps to organize our thinking about what strategies are needed and clarifies where responsibility and authority lie for making changes in the various components of the educational system. Although the framework is designed as a means of thinking about national standards, it is equally appropriate as a means of thinking about standards at state and local levels.

Dissemination involves developing a general awareness of the existence of the standards document among those responsible for policy making, programs, and teaching, and providing support and encouragement for the changes that will be required. It includes addressing the questions, "What are the standards?" "Why are they needed?" and "How could they be used to shape policy and practice?" Especially during dissemination, be articulate about what they can and cannot do, and why they are worth supporting. Being clear in the dissemination phase will help neutralize criticisms and build support.

Interpretation is about increasing understanding of and support for standards. It involves careful analysis, dialogue, and the difficult educational task of challenging current conceptions and establishing a knowledge base that helps the community respond to critics. Deeper and richer understanding of standards is the goal. It is not too early to plan activities, publications, and a Web site that will help with questions and the interpretation of standards for different groups in the technology education community and for different aspects of the instruction core.

Implementation involves changing policies, programs, and practices to be consistent with standards. People modify the district and school technology curriculum, revise criteria for the selection of instructional materials, change teacher credentialing and recertification, and develop new assessments. Enacting new policies, programs, and practices

builds new understandings that can feed back into interpretation.

In the <u>evaluation</u> dimension, information gathered about impact can contribute directly to improvement. Monitoring of and feedback to various parts of the system result in modification and adjustment of policies, programs, and practices.

At some point, as a planned element of the process, revision of standards occurs, incorporating the new knowledge developed through implementation and evaluation and drawing heavily on input and discussion generated in the field by the original document reviewers. It is important to identify this element of the strategy as it signals a dynamic and changing quality of the standards.

There exists some logical sequence to the dimensions. For example, people need to become aware of standards before they deepen their understanding through interpretation activities. Likewise, implementation without understanding can lead to change that is mechanical, superficial, and — in the extreme — can imperil reform with the dismissal that "it doesn't work." Effective implementation requires interpretation and understanding. Revision without adequate evaluation will not reflect what is learned from the original effort.

Although the framework may seem linear, its dimensions are intertwined. For example, because practice informs understanding, implementation can lead to a new or deeper interpretation of the standards or elements of them. Evaluation and reflection pervade all other dimensions. The different dimensions of the framework are played out with different audiences. These audiences are organized into four categories that reflect primary roles in the educational system: policy, program, practice, and political and public support.

The framework helps to address the question of how different stakeholders participate in standards-based reforms. For example, an <u>interpretation</u> activity for <u>colleges and universities</u> could be the

development of a publication that focuses on the role of design in ITEA Standards. The publication would help postsecondary faculty and administrators understand the standard more deeply so they could improve their teacher preparation programs. One challenge of standards-based reform is to strategically engage the key participants in such a way as to create the most leverage for change in the system.

Although the standards developers likely have major responsibility for dissemination, they can be assisted by state agencies, special coalitions, or cadres of leaders especially equipped to do so. Responsibility and authority for implementation do not necessarily lie with the organizations that developed standards. The organizations can provide support and expertise, as well as help in networking various implementers, but they are not always positioned to change policies and practices directly. State supervisors, curriculum developers, teacher educators, and classroom teachers assume major responsibility for implementation. Revision again becomes the responsibility of the developers, with substantial input and interaction with others in the system.

Conclusion

National standards for technology education will be an important tool in educational reform. In time, they should contribute to new perceptions of technology education within the larger educational community and a better understanding of technology by citizens. Do not be distracted from your vision. Develop the best standards possible; establish commitment and direction within your community; explain to a broader public what technology standards are and why they are important; and pay very close attention to the single most important resource for achieving higher levels of technological literacy for all Americans-the classroom teachers of technology.

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(mis) education ...?

The Abuse of Ritalin

by Randy L. Howell, R.N.



he use of the stimulant Ritalin (Methylphenidate) to treat problem behaviors in the classroom has increased at an alarming rate in the United States. Ritalin, a mind-altering drug, has the potential to do more harm than good to a child's development.

Encouraging children to depend on drugs to control behaviors that our teachers are unable to deal with, speaks volumes of the problems we are now experiencing in our school system. Critics of the medication not only voice concerns about the side effects of the drug, but also note the real problem of Ritalin abuse in our schools.

Ritalin is used to treat children diagnosed with conditions such as "attention deficit disorder" (ADD), also known as "attention deficit hyperactivity disorder" (ADHD). Roughly three to ten percent of school aged children, ten times more boys than girls, in the U.S. are diagnosed with ADHD. These children generally have difficulty organizing work and are easily distracted. Teachers note that children suffering from the condition frequently call out inappropriately in class and have difficulty waiting their turns, which leads to disruption in the classroom setting. Self-esteem suffers because the child experiences more failure than success and is criticized

by teachers and families who do not recognize the health problem.

Treating hyperactive behavior with stimulants like Ritalin dates to the 1930s, when Charles Bradley, a researcher from Rhode Island, gave Benzedrine an amphetamine to fourteen hyperactive children. Mr. Bradley noted that instead of having an accelerating effect on these children it actually calmed them down and improved their behavior. This is the same effect sought by doctors and teachers who recommend the use of drugs like Ritalin, Aderal and Dexadrine.

As awareness of ADHD has grown, the behaviors associated with the diagnosis have expanded as well. It now encompasses a broader array of symptoms than it did a decade ago. With the expansion of ADHD's defining characteristics, a substantial increase in the use of Ritalin has followed. It has been estimated that in the 1990s it has increased by some 130 percent in the United States, from 4.3 million prescriptions in 1993 to 11.4 million in 1998, according to IMS America, a health care information company. Use peaks at the start of the new school year and levels off in the summer. The United States consumes five times as much Ritalin as the rest of the world. On average roughly 223 grams of Ritalin are used per 10,000 people, with states like Delaware, Virginia, New Hampshire, Iowa and Michigan leading the way, consuming roughly 350 grams per 10,000 (DEA). Critics note that the growing uses of medications such as Ritalin to control unwanted behavior may be attributed to a society that is increasingly willing to address complex issues with "a pill."

The Drug

Ritalin is a Schedule II narcotic, and is regulated by the federal government the same way Demerol, Opium and Codeine are with respect to its abuse potential. Stimulants such as Ritalin given to "normal" people may give one a feeling of elation or increased energy. It has been referred to by some as "poor man's cocaine." The effect of Ritalin is on the balance of the brains' neurotransmitter. These transmitters are chemicals that transmit or inhibit brain impulses. Exactly how much and which neurotransmitters are affected is not clear. From a medical perspective, Ritalin is as close to a perfect drug as you can get with regards to the time of onset

and length of effect. It starts working within minutes after it is ingested, with the duration of its effect lasting approximately four hours, and then disappearing from the patients system.

Unfortunately, what some would herald as a perfect drug does have its down side. Potentially damaging effects of the drug include not only addiction and abuse, but also withdrawal reaction on a daily basis. Permanent neurological tics, including Tourettes Syndrome and possible psychosis, depression, insomnia, agitation and social withdrawal have also been associated with its use. Patients and parents also voice concern that the calming effect and its impact on concentration may dilute the users' creativity and personality.

Potential for Abuse

The use of drugs such as Ritalin that have the potential for abuse should be cause for concern in our school system. According to a study in the Journal of Development and Behavioral Pediatrics, about 16 percent of children taking medications for ADHD have been approached by fellow students asking them to sell, trade or give them their medications.

About 4 percent of students surveyed said their medications had been stolen at least once. Despite the relative ease which these medications could be accessed, few students or administrators felt that medication abuse was a problem. In a 1996 DEA press release it was noted that students were giving or selling their medications to classmates, who were then crushing and snorting the drug like cocaine. This type of activity resulted in two deaths in 1995 of school age children in Mississippi and Virginia.

Policies for the storage and distribution of these medications vary widely. The majority of schools store drugs such as Ritalin in locked cabinets in a central location, in most cases the nurses or principle's office. In our health care institutions a drug of Ritalin's potential would be kept under lock and key, allowing only those specially trained and with years of education to have access for distribution. One would need to literally place one's license on the line to assure that the medication did not get into the wrong hands. But according to a study by Marshfield Medical Research and Education Foundation in Marshfield, Wisconsin, more than 30 percent of schools surveyed kept the drugs in unlocked cabinets and teachers rooms. Students are even allowed to carry the medications on their persons increasing its abuse potential. At times, staff members with no health care background distribute the medications, which in and of itself opens the school and its administration to liability issues.

Part of the solution addressing accessibility of a drug like Ritalin in our public schools may be to increase qualified health care professionals in the school setting. Across the country there are 86,000 public schools, and only 60,000 school nurses to meet the need of roughly 46 million students. Twenty million of those students have chronic conditions. By law, only 17 states require school nurses not only to monitor, but also to distribute these potentially dangerous drugs.

Along with controlling access to these medications we must address the issue of diagnosis to benefit the child or the classroom. Diagnosis of ADHD and its subsequent treatment with Ritalin many times stems from a concern and recommendation from the child's teacher. Undoubtedly, these children make the classroom difficult to manage, more importantly the quality of education they receive is affected as well. Changing our focus in the classroom to accommodate children with special learning needs from one of control to one of assistance may best be approached by increasing student to teacher ratios. Treatment needs to include behavioral therapy, parent and teacher education, and most importantly patience, not the dumping of toxins into our children's brains.

Randy L. Howell, a registered nurse in Maine, New Hampshire and Vermont is a Consumer Programs Educator for the Northeast Health Care Quality Foundation, a non-profit health care group serving northern England.



(mis) education . . .

American Education in the Information Age

by Andrew T. LeFevre

President Al Gore unveiled the findings from a new report by the National Center for Education Statistics, showing that nearly 80 percent of the nation's public schools were connected to the Internet at the end of 1997 — more than double the number in 1994. These numbers look encouraging for reaching one of President Clinton's main campaign goals: having every school in America wired to the Internet by the year 2000.

Proponents of increasing technology in the classroom argue that allowing teachers to use the most advanced tools available will help them better teach our children. Technology will help raise students test scores and close the gap that is growing between American students and students from around the world.

After spending over five billion dollars during the 1997 — 98 school year to begin placing computer infrastructures in their schools, school boards are now facing more complicated questions about the role of technology in classroom. How will they continue to pay for the continuing upgrades necessary to keep up with technological advances; how to best use that technology to improve student learning; and finally, will computers and the Internet actually improve student learning?

As with many other areas of education, dollars needed to implement a program is the most significant obstacle faced by schools in their decision-making process. The five billion dollars spent in '97 — '98 to connect 78 percent of the county's 80,000 public schools to the Internet seems like a large sum of money. But upon considering

that only 27 percent of the classrooms were wired, you begin to grasp the staggering dollar figure necessary to allow every student equal access to a computer and the Internet while at school. And while the federal government, along with many of the state governments, is proposing programs to help schools pay for the necessary equipment, the majority of the cost is still paid at the local level by parents and businesses.

Many school districts located in less affluent areas of our country will not be able to afford providing the same level of technology as their richer neighbors, even with federal and state help. What then can they do to help their students have access to the latest technology? As was the case in the past, private industry often provides an answer. In the late '70's and early '80's, schools were feeling the same pressure to use advancing television technology resources in their classrooms. And much like today, money was a problem. Several companies stepped forward and offered high tech audiovisual systems at no cost - if a school agreed to show a 10 minute news program, geared towards school age kids, followed by two minutes of advertisements. Today, over 50 percent of schools in our country take advantage of such a program and are able to use the audiovisual equipment in any way they deem necessary.

Today, with the growing use of computers and the Internet in the class-room, companies are once again stepping to the forefront in helping schools meet their education needs. Several companies are offering schools up to 15 PCs, a server and high-speed Internet access along with word processing software at no cost. In exchange for this approximately \$90,000 worth of equipment, the school agrees to allow the companies advertisement space on web browsers used by students navigating through the Internet.

Many opponents to these programs claim advertisements in the classroom blurs the lines between pubic education and private life. However, the fundamental appeal to these types of public/private partnerships is that there is a net gain for both parties involved. Companies pro-

vide a service and are able to make a profit while schools get much needed resources that they did not have the funds to purchase. And unlike federal programs, with all the strings that are attached to them, schools are able to use the equipment to best meet the educational needs of their students. The bottom line is that theses programs provide much needed flexibility to schools in need of financial assistance. Not every school will, or should, take advantage of the services these companies provide. But the choice is theirs to make.

There have been many studies done to show how computers in the classroom positively and negatively impact student performance. What the studies have in common is the agreement that computers alone don't make the difference. Computers have to be in the right hands and used in the right ways in order to raise student achievements. In fact, a recent study by Harold Wenglinsky of the Educational Testing Service found that most of the nation's schools are not using computers in ways that are linked to better student scores.

Therein lies the biggest problem facing schools: how to best utilize this new technology to teach our children. Many teachers began teaching in classrooms before calculators became a staple of the American student. Now we are asking them to become proficient in the use of technology that is light years ahead of the computers that were first introduced in the mid '80's. Just putting a computer in a classroom and wiring it to the Internet does not mean student scores will improve instantaneously. Computers and the Internet are educational tools just like the black board and textbooks. Teachers are the lynchpin that makes the whole educational system work. Technology will not turn a poor teacher into an educational superstar or propel a poor student to the honor roll.

Energetic and imaginative teachers who currently are able to teach their classes in a manner that motivates and excites their students to higher levels of achievement will find computers and the Internet a valuable new tool in their daily task. On the other hand, teach-

ers who struggle to hold the interests of their students may latch on to computers as a way to augment their meager teaching skills. But just as television is no substitute for parental involvement at home, computers and the Internet will not make up for lack of teaching skills at school.

One of the areas that new computer technology is making a difference in student education is by helping to increase parental involvement in their children's education. Either via a school web site or by utilizing computerized voice messaging, parents can find out first hand what their children are learning about on a daily basis — even see when their home work assignments need to be completed. Parental involvement is one thing that the experts can agree on that has a dramatic impact on how well a student does in school.

Until computers are available in the numbers and time necessary to truly change how students are taught, it will be extremely difficult to determine their effect on educating students. And once the technology is available to all students, it will still be up to the teachers, and parents, to make sure it is being used in ways that will help their children learn.

We would do well to remember that the ultimate goal of our educational system is to teach our children how to think for themselves. Technology can be a wonderful tool, but a high-speed modem will never replace a quick mind.

Andrew T. LeFevre is Director of the Education Task Force at the American Legislative Exchange Council. The American Legislative Exchange Council (ALEC) was founded in 1973 by a small group of Democratic and Republican state legislators who shared a common commitment to the Jeffersonian principles of individual liberty, limited government and free markets. Today, ALEC has grown to become the nation's largest bipartisan, individual membership organization of state legislators, with 3,000 members throughout the 50 states. Nearly one-third of ALEC's members hold leadership positions in their legislatures.



(mis) education . . . ?

The Voucher Wars in the Golden State

by Lee Hubbard

San Francisco— Sitting in a small office building on top of Round Table Pizza, the entrance to S.R. Martin College Preparatory School looks like the entrance to an apartment. Cars whiz up and down San Bruno Avenue as a group of ten students from S.R. Martin walk to the entrance of the school and up the stairs.

The school doesn't have the luxuries of most public and private schools that have gyms or playgrounds, so students have to go to a local park to participate in Physical Education. While the location and the facilities at S.R. Martin could be considered second rate, the education-taking place is first rate. "We stress excellence and we hold the students to high expectations," said Mary Martin, a former public school teacher who started the private school in 1990. "I am preparing them for a world where affirmative action isn't there, and they need to be competitive on their own."

Tuition at the school is \$5,800 for

students in the high school, and \$4,200 in middle school, and in order to graduate from the high school, students have to meet a goal of scoring 1,000 on the SAT test. It's with a zeal for excellence that Martin pushes the 65 students in her school to succeed, in spite of societal and neighborhood pressures they may face. While the grade point average for Black students in the San Francisco public school system is 2.12 in the middle schools and 1.81 in high schools, at S.R. Martin, the average grade point average is 2.50 for middle schools and 2.80 for high school students. "The difference between S.R. Martin and public schools is that we believe that all children can learn and will learn," said Martin, as she moves down the hallway looking in on students and teachers.

She is a stately figure, earning respect from both teachers and students in the school who applaud her commitment. She's part-general, part-parent, and partfriend to the students at this middle and high school she started with her own money after claiming to have a "revelation from God" to develop the educational skills of Black students.

A Brief History

S. R. Martin is one of several schools in the state that are achieving success despite of poor physical structures and a lack of resources. Schools like S.R. Martin are the type of schools that would benefit from a taxpayer financed school choice or voucher system. This would allow schools like Martin to expand its facilities, and allow parents to enroll there children in school's that are cranking out scholars in neighborhoods where educators make excuses for students who perform poorly in public schools. "At one point in my life, I was opposed to vouchers because I thought that Black kids would be exploited, "said Mary Martin. "But if a parent feels that this is the only way a child

will get a good education, I am all for it." While California voucher advocates worry about voucher opposition from teacher unions, voucher advocates have enough problems mobilizing a grass roots in the inner cities, where parents are pleading for help.

A 1998 poll by the Joint Center for Political and Economic Studies, a Washington D.C. based think tank, found that 57.3 percent of blacks were in favor of vouchers. The numbers jump to 86 percent black support in the ages of 26-35. A national Gallup poll echoed these numbers, in a poll noting that 51 percent of White Americans and 68 percent of Blacks were in favor of vouchers. The subject of school vouchers is one that stirs debate in education circles. Some educators like Delaine Eastin, the California Superintendent of Public Instruction, thinks they are a gimmick. "I do not support vouchers. I think we should fix the problem instead of giving a few children vouchers to get away from the problem," said Eastin. Others like Dr. Julia Hare of the San Francisco, California based Black Think Tank, believe vouchers are one of the greatest things to happen to education. "Vouchers enable education and the public schools are failing black students. Why shouldn't we give choice for someone's future," said Dr. Hare. While most liberals oppose the concept saying it would destroy public education, most conservatives love vouchers because they say it's a way to give parents choice in there children's education.

Vouchers were first proposed by economist Milton Friedman shortly after the United States Supreme Court outlawed state sponsored school segregation in 1954. Used by white parents in southern school districts who didn't want their children attending schools with black children, vouchers were called scholarships then, and parents were allowed to take their children out of the public school system and enroll them in all-White private schools. In one extreme case, the school district in Prince Edward County, Virginia, closed its doors for five years in an effort to issue vouchers to White parents, while the Black students were either taught in community-based makeshift schools or forced without education for five years. Later ruled unconstitutional, the concept would forever change the face of education. Although it died a quick death in the late 1950's, the issue was resurrected in Milwaukee, Wisconsin, by an unlikely source: The Black community. Although vouchers were once used to separate White children from going to school with Black children, vouchers became a tool for Black activists to separate Black children from ineffective schools. This is what happened when Polly Williams (D) a Black state legislator in Wisconsin, became the driving force behind Wisconsin creating the first pilot voucher program in the nation in 1990, that allowed 1,000 children to attend non-religious schools of there parents choice. "The way I see it, Parental choice is the difference between empowerment and enslavement," said Williams. "The system is preparing our children for slavery. Drop out by the tenth grade, get into street life. When you should be walking across the stage getting a diploma, you're standing in front of a judge wearing chains." As time progressed, the program was expanded to religious schools and 15,000 students in the city were added to the program. In June of 1998, the Wisconsin Supreme Court ruled that the expansion of religious schools does not violate the separation of church and state. The U.S. Supreme Court failed to head the appeal, thus leaving the Wisconsin ruling intact.

A Look at California

The nation's political stage is normally determined by California, hence voucher advocates from across the country are zeroing in on the Golden State as the final battleground in the voucher wars. Although there are several privately funded voucher programs across the country, Cleveland and Wisconsin are the only two cities that have public financed voucher programs. Voucher advocates see California as the battleground in the voucher wars that could spread across the country. "Tax payer vouchers in California would give other states the impetus to move," said Bob Hawkins, the President of the Institute for Contemporary Studies, an Oakland, California based conservative think tank. "It would be like Prop 13, the voter approved initiative that limited property tax limitations. California did this and the rest of the states enacted similar legislation. Vouchers in California would be a major threshold in the voucher battle." Although there had been talk about implementing vouchers in California in the 1970's, the first effort to get major vouchers off the ground took place in 1993 with proposition 174. The proposition called for giving a \$2600 voucher for every student in the state of California who wanted to participate in the voucher program. At that time, the state of California was spending close to \$5,200 on a student. The voucher would allow the child with the voucher to go to any school they wanted to, but students in private schools had to wait two years to get the \$2600, because the proposition organizers didn't want the rush to vouchers to absorb tax-payer money immediately. Although it polled favorably high in the beginning, proposition 174 went down to a whopping defeat 30 percent for the proposition and 70 percent against 174.

"Proposition 174 failed because the opposition outspent us 8 to 1 and the teachers unions convinced people that prop 174 was going to cost taxpayers money," said Alan Bonsteel, a prop 174 organizer, and author of the book "A choice for our Children," which discusses school-choice. The Anti-174 forces, led by the California Teachers Association spent \$24 million versus \$3.7 million for the prop 174 side. Although proponents for the prop 174 side led by Bonsteel, and Wilbert Smith, a former Pasadena school board member, outwitted the anti-174 side all across the state, the \$24 million raised by the anti-174 forces bombarded the television and radio air-waves with negative ads. A large portion of that money came from payroll deductions. This spending was challenged by a group of 700 teachers and an arbitrator ruled that the state initiative that qualified for the state ballot. The natural allies of the voucher movement, the GOP, also hampered voucher advocates. The GOP's standard bearer in the state of California, the then California Governor Pete Wilson failed to support the initiative, as



he stayed neutral. "That certainly didn't help," says Bonsteel.

"Another reason prop 174 failed because the idea of vouchers was still new," said Hawkins. "No major politicians came out for it and Pete Wilson was neutral on it. I also think it was one of those top down initiatives that had no consultation with local communities and organizations."

What's Next?

In the past few years since the prop 174 debate, the subject of vouchers has resurrected, to die a slow death. But as we look to the year 2000, education will

be a major issue. California Governor Gray Davis (D), is trying to institute some major education reforms such as the end to social promotion, exit for seniors in high schools, reading academies for kindergartners through fourth graders, charter schools, and teacher re-training. His reforms became highlighted after scores from the national Assessment of Educational Progress found that 4th and 8th

grade students performed below the national average. Governor Davis has failed to mention vouchers, although he did say while campaigning for governor against Attorney General Dan Lungren (D) in 1998, that vouchers are an option he would look at if his education reforms failed. While Governor Davis' reforms are taking place, there is a push by voucher advocates to bring vouchers back into the education dialogue, thereby placing an initiative on the ballot. There are two voucher plans being discussed as a possible statewide initiative.

One of them being proposed is the District Choice Initiative from Isaac Haqq, head of Oakland, Californiabased group, Parents Against Substandard Schools. The District choice Initiative would allow California voters to vote to allow individual school districts to vote for vouchers according to the needs of that particular community. "District choice allows voters in each district to make the decision on whether or not they want vouchers," said Haqq. "District choice recognizes and respects the autonomy of each district and prop 174 did not." Haqq asserts that one of the problems with Prop 174 was that it forced vouchers on everyone in the state. He said if his statewide initiative was to pass, then voters could go to their prospective school districts and



vote for choice. If the district approves the voucher plan, the voucher would be funded by the state, and parents would receive the exact amount of money being spent by the state on students in the public schools.

The other plan being put forth is Local Choice 2000, headed by Tim Draper, a Silicon Valley venture capitalist. With Local choice 2000 parents, a statewide vote for the initiative would allow every parent and child in the state to receive a tax credit towards scholarships for \$4,000 tuition fees. Children in private schools would receive partial scholarships the first year Local choice takes effect, and Districts or counties that refuse taking part in the choice program could opt out of it by a vote. While the District Choice Initiative and the Local choice

2000 initiative seem to be similar, the Local Choice Initiative has come under fire from voucher advocates. They've said the \$4000 in funding is to small, and by allowing everyone in the state into the voucher program, and then giving districts to vote against vouchers, it is complicating the process. There have also been complaints that during the drafting phase of the plan, people in the voucher movement weren't contacted. "I am not sure about what is going on, and the Local Choice 2000 isn't that clear," observes Bonsteel.

Others like Hawkins think that Lo-

cal Choice 2000 is flawed, and that it was put together using the CEO approach to politics, which doesn't work in a state as diverse as California. Hawkins feels that the District Choice Initiative is the way to go. "The District Choice initiative is something we need to look at to get vouchers passed," said Hawkins. But even if either one of the current voucher proposals gain enough signatures

for the ballot, passing either of these initiatives will be a hard mountain to climb in the face of hostile teacher unions and education bureaucrats. But the key to vouchers passing in the state of California may rest in the educational establishment's failure to reform itself. "My own sense is that the education reforms Gray Davis is performing won't work and people will get frustrated and act," said ICS's Hawkins. "The bureaucracy will water them and the schools will get worse. Then vouchers will be an option."

Lee Hubbard is a San Francisco Based journalist who has written about school choice and empowerment issues for a number of publications. He can be reached by e-mail at superle@pacbell.net

(mis) education ...?

A Clearer Future: Black Colleges Chart Course for the Next Century

by Ernie Suggs

A s an N.C. Central University freshman in 1971, Freddie Parker was among hundreds of black college students who marched to Raleigh to protest NCCU's merger with the University of North Carolina system.

Parker said NCCU students — as well as students from the four other state-supported Black colleges and some whites — worried that traditions would die and that their school would be renamed UNC Durham.

"We had a professor who would say [that] when you bring your children here in 25 years, they will say, 'Daddy, I thought you went to an all-Black school?' "said Parker, now a history professor at NCCU. "Well now, here we are 25 years later," he said. "Black institutions will be around. Their character and missions will change, but they'll be around for many years to come."

Four years shy of the 21st century — despite all the slings, arrows and blows they have taken — Black colleges as a whole are surviving. But more may fall by the wayside — just as 10 have in the past 20 years.

"... Black campuses willing to take risks — with sound political support, good leadership, good faculty, well-chosen students that are serious — will not only survive, but get stronger," said N.C. A&T State University Chancellor Edward Fort.

"Those that get bogged down with bickering, and schisms between the administration and faculty, fail to be visionary, fail to realize the campus must be marketed, won't survive."

Reinventing Missions

Those that do survive will have to rely heavily on skill and luck. Some will have to make themselves over; others will be forced to surrender their identities.

"Black colleges have to reinvent their missions, which are constantly changing," said author Gerald Early, who is writing a book on Fisk University. "They have to ask, 'What is our mission and how are we preparing for the 21st century."

Reginald Wilson, of the Office of Minorities in Higher Education at the American Council on Education, said the schools will survive, but not in their present state. Some of the small, marginal schools will have a hard time making it, he said. But strong private schools — such as Spelman, Morehouse and Hampton — will thrive.

Many believe private black colleges stand a better chance of surviving than their public counterparts. But of the black



colleges that have closed in the last 10 years, all have been small and private.

"Privates have to be treated differently, because they are formed by the philosophy of their boards of trustees, not the state," Wilson said. "I don't see them going away."

But private colleges receive no state assistance. They depend solely on corporations, federal money, tuition, donations, church or organizational affiliations and the United Negro College Fund.

Budgets Squeezed at Privates

Alison Ligon, a Hampton graduate, said she practically was raised on the Fisk University campus and witnessed the financial troubles that led to corporate bailouts at the once-proud school.

"I know about the times when the heat was almost turned off and [former President] Walter Leonard had to go into his own pocket," said Ligon, now a graduate student at Duke University. "I think it will have its heyday again. But if our major investors left [Hampton], we'd be in the same situation."

Bennett College President Gloria Scott said she and her fellow private college presidents fear not having sustained, stable finances. Because of traditional hardships in the Black communities, tuition at Black privates has remained relatively low, she said.

For the 1995-96 school year, tuition at Bennett in Greensboro was \$8,396. Salem, a women's college in Winston-Salem, charged \$11,275.

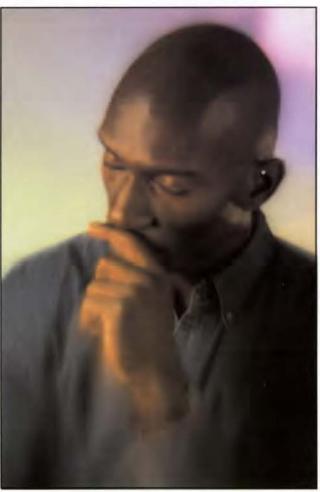
"Tuition is low, because access isn't easy," said Scott, who recently saw Bennett's endowment double to \$12.5 million.

As a general rule, she said, privates rely on tuition to pay for 54 percent of the budget. "We are only getting about 38 percent, which is a big gap," Scott said. "Not only must we account for the rest of the budget, but we also must get that other 12 to 15 percent that tuition didn't cover."

During the next decade, Bennett plans to increase enrollment from 612 to 1,000 to help ease the budget squeeze. "The support of the larger student body will provide better funding for us," Scott said.

Higher Standards

The main threat to the state-supported black colleges will be philosophical changes in their missions. Many ob-



servers wonder how long states will continue to support two separate public school systems and justify duplication of programs.

Black schools could face stiffer recruiting and academic competition with white schools. Wilson said higher standards could be the death of public Black colleges, which always have recruited marginal students and have taken pride in molding them.

"They need to upgrade the standards bit by bit and stop taking public colleges off the hook," George Mason University economist Walter Williams said. "At most colleges, they have freshmen remedial classes. If a student is risky, why admit him anyway? It's a waste."

So the question may not be simply whether public Black schools will survive, but whether they will survive as they now exist. "The public schools in states where the Black population is in a [small] mi-

nority will no doubt change," Wilson said.

In West Virginia, for example, only 3 percent of the state's 1.3 million residents are Black. West Virginia's two state-supported historically Black colleges have become predominantly White.

In Ohio, Central State University has been having serious problems for years, under the state's watchful eyes. The school has seen a string of chancellors resign or get fired, and is in such poor shape that students can't live on campus because of safety concerns.

"Central State has been in trouble for years and what happened there doesn't happen overnight," Wilson said. "Water problems, fire alarms not working, students having to live in hotels — that takes awhile to happen and it is terribly tragic."

States Share Responsibility

But he stops short of placing all the blame on Central State's shoulders.

"The governor is trying to bail Central State out, but he was going to let it die on the vine," Wilson said. "Central State can't even get a certified audit. How could the state let that happen?"

Wilson said northern states such as Maryland and Pennsylvania, where the first Black colleges were founded, tend to be more liberal when dealing with their public Black schools.

The worst state, he said, is Mississippi, which has tried to merge or to close some of its Black colleges. "North Carolina has done a fairly good job of reinforcing Black schools," Wilson said. "A&T has a strong engineering school, which has moved up in the rankings and Central has a very good law school."

By many accounts, each of the five public historically Black colleges and universities (HBCUs) in North Carolina — A&T, NCCU, Fayetteville State, Winston-Salem State and Elizabeth City State — appears to be on solid ground.

"Each one is offering an excellent education to any student who wants to get it," UNC system President C.D. Spangler Jr. said. "There have been major improvements over the last 20 years." He pointed to better facilities, stronger students and better faculty.

"We are not saying what is best for the state or North Carolina," Spangler said. "What we are saying is that we know what is best for our university. That's a subtle distinction. Nobody else knows how to do that better than us."

Filling a Niche

FSU Chancellor Willis McLeod said his school is enjoying its largest freshmen class since 1986 — 597 students. Schools such as FSU work because they fill an educational niche, McLeod said.

"The student that graduates with a 1,200 SAT, who comes from a family with means to write the big tuition check, have a computer and drive to school with credit cards in their pockets, are not coming to FSU," he said. "There must always be colleges to accept students that still need added academic development and personal growth development as well. That's what separates HBCUs from traditional White institutions."

Fort said the campuses that survive will be the campuses that look globally. While other schools talk about being a part of the community, he said, A&T wants to conquer the world.

Before the year 2010, A&T will have more than 10,000 students — up from more than 8,000 today — and at least seven doctoral programs, Fort said. His job is to see that goals are properly planned now. To succeed, he said, "You have to stay focused, be risk-oriented, involve the faculty and know the students. If you do

that, you can move mountains. They are surmountable if you have the will and drive and surround yourself with talented faculty and alumni that back you. Some won't make it, but A&T will not be in that group."

Black schools also will have to get their houses in order. In an age in which more and more Black students have choices, many are no longer likely to attend a Black school just because it is Black.

"We have to do a number of things, because students don't want to give up quality. They don't want to trade that," said Walter Massey, president of Morehouse College. "We have to have standards that are comparable to the White schools, if we want to attract good students."

Henry Ponder, president of the National Association for Equal Opportunity in Higher Education, said Black colleges have never been short on delivering educational services, but have been lacking when it comes to changing attitudes and opinions.

"We must not get trapped into thinking that the battle has been won," he said. "We can't relax, because the system is out to do you in. We need to understand that the struggle is on and we must be vigilant."

Marketing Key to Success

To many, marketing seems to be a key to future success. Schools tend to spend more time lauding their famous graduates than they do in hailing themselves and their programs.

"Our institutions do a good job of advertising their distinguished graduates," Ponder said. "There is hardly a student at Union that is not aware that Doug Wilder graduated from Virginia Union. I don't believe there is an alumnus of Howard who can't recite the litany of Howard University's distinguished alumni."

But by the same token, how many people know about Howard's Moorland-Spingarn Center, one of the world's largest and most comprehensive repositories of documents on the history and culture of Blacks?

"They have to use the same medium
— radio, television, magazines — to get

their stories out," Ponder said. "I would say that Howard's public relations budget is less than half of what Georgetown's is."

Black schools also will need to narrow their focuses and missions.

"Each school has a different mission," said William Gray, president of the United Negro College Fund. "Just because they are all HBCUs don't mean that they are the same. Shaw, St. Aug's, Johnson C. Smith, Bennett and Barber Scotia are all different."

All schools, he said, have to analyze their situations, emphasize their strengths and get rid of their weaknesses. "There has to be a clear definition and niche," Gray said. "A black college of 700 can't be everything to everyone."

In 1996, South Carolina State University celebrated its centennial. To commemorate the occasion, the school held a year-long celebration that included, among other things, photo and memorabilia exhibitions, heritage days, seminars and speeches.

"The institution has always tried to strive for excellence in trying to evaluate programs and services, while always looking back to see where we came from [while] planning for the future to see where we are going," said Barbara Jenkins, who has worked at S.C. State for 40 years and is dean of library and information services.

Jenkins, chairwoman of the centennial committee, said the theme for the year is "A Century of Excellence: Reflecting the Past, Assessing the Present, Perpetuating a Legacy." She said the theme could apply to any of the 103 black campuses in the United States. "I think a lot of the black institutions have survived through a lot of odds," said Jenkins, a 1954 Bennett College graduate. "But one thing they have always focused on is providing graduates to pursue a line of work, to take part in the community and make contributions to the society. It's as simple as that."

Ernie Suggs is currently a journalist with The Atlanta Constitution.

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(mis) education . . . ?

Gambling on Education

by Dr. Susan Fillippeli

hile attending graduate school in the Midwest during the late 80s, I became accustomed to remarks about my southern accent. My accent isn't very pronounced, in fact most of my acquaintances in Alabama tell me I don't have an accent at all. But I have enough of a drawl that friends would beg me to order "key lime pie" in restaurants or have to translate for me when I ordered a "Die-ahtt Co-Cola." I found it amusing until a "friend" turned to me in class one day and remarked how proud she was of me. When I pressed her for details she told me "I didn't know there were intelligent people in the south."

suppose stereotypes southerners as ignorant, backward hicks persist in part because most of the standards we use to measure educational achievement indicate that the southeastern states tend to cluster at the bottom. For example, while the national average of dollars spent per pupil in public schools for 1998 was \$6,168, not a single southern state met that average. The closest was Virginia with a per pupil expenditure of \$6,023. The remaining 10 states averaged spending \$5,105 per student in public primary and secondary schools. Mississippi spent the least at \$4,291.

Of course spending more money does not always translate into educational excellence, but southern states tend to cluster more towards the bottom of educational assessment measures than the top. ACT scores for 1998 show that the national composite core for all students completing core courses was 22.1. Not a single southern state met the national average. Southern students taking the SAT appeared to fare better. In 1998 the combined national average for the verbal and math tests was 1017. While students from six southern states (Alabama, Arkansas, Kentucky, Louisiana, and Tennessee) scored above the national average, it should be noted that

an average of 9% of students took the SAT in those states. The national average for students taking the SAT is 43%. In the southern states where a higher percentage of students took the SAT, all scored below the national average.

That something needs to be done to raise educational standards in the south is painfully obvious to parents, educators, administrators, and politicians. The most popular programs involve improved teacher testing, increased technology in the classroom, state funded college scholarships for students who graduate with a "B" average, and the establishment of public pre-kindergarten programs. While these programs appear to be popular with parents, teachers, and administrators, politicians are scratching their heads trying to figure out how to pay for new educational programs in a region of the country where raising taxes is simply not an option.

Politicians in the south are, for the most part, conservative. It doesn't matter too much whether a particular government official is a Republican or a Democrat, no one gets elected in the south by campaigning as a liberal. (In one campaign I worked on last fall, the Republican candidate dug up an interview where his opponent called herself an "old-hat liberal." When he reproduced her quote in his campaign literature he was accused of engaging in dirty politics. "Liberal" is just about the lowest name one candidate can call another in Alabama.) While there are some differences between Republican conservatives and Democratic conservatives, the one belief they are likely to hold in common is their unwillingness to raise taxes.

Two of the south's newest governors are Jim Hodges of South Carolina and Don Siegelman of Alabama. Both identify themselves as conservative Democrats, each making education the number one issue in their campaigns last fall, both pledging not to raise taxes to pay for the new programs they were proposing. Nationwide, property taxes contribute 66% of local revenues for public elementary and secondary schools and are by far the largest single source of funding. Southern states generally have some of the lowest rates for property taxes in the nation with Alabama's property tax the lowest. Moreover there is no required state minimum in Alabama for local tax mils used to support schools. Voters throughout the state have demonstrated time and time again that they are not willing to raise their property taxes in order to support their local schools. (There are a few notable exceptions to this claim. Some of the school systems around Birmingham, Huntsville, Auburn, and Tuscaloosa have excellent school systems that receive strong local support. Most school district in Alabama are not so fortunate.) Hodges and Siegelman both know that a proposal to raise taxes is political suicide. As a result they each support a state education lottery modeled after the one created in 1993 by Georgia's former governor Zell Miller.

According to the Georgia Lottery Corporation, since its inception the Georgia Lottery has generated more than \$2.85 billion to fund the state's Hope Scholarship program, the Georgia Pre-kindergarten program, and capital outlay projects for technological improvements to the state's public schools as well as its colleges and universities. Lottery official estimate that more than 360,000 students have been able to further their education through Hope Scholarships and that some 246,000 fouryear-olds have benefited from the state's Pre-kindergarten program. In addition, over \$1.1 billion have been used for capitol outlay and technological improvements. Neighboring states like Alabama and South Carolina, well aware that many of their citizens are buying lottery tickets in Georgia, want to use that money to benefit their own schools.

Not that there won't be a battle in each of these states to pass a lottery referendum. Another concept conservatives don't like too much is gambling—especially Republican conservatives. It is no small coincidence that Zell Miller, Jim Hodges, and Don Siegelman are all Democrats and their states are all Bible Belt strongholds for Christian

Conservatives. Alabama is the state, after all, where former Governor Fob James threatened to call the Natural Guard to keep Federal Courts from removing the Ten Commandments from Judge Roy Moore's courtroom. It is also the state where all biology textbooks have disclaimers pasted into their front covers warning students that "No one was present when life first appeared on earth. Therefore, any statement about life's origins should be considered as theory, not fact." Most Christian conservatives oppose lotteries on the grounds that gambling is sinful and immoral. They have pledged to fight Siegelman's lottery proposal with all the resources they can muster.

Given the strong religious commitment of many southerners, it is surprising to discover just how many southern states actually use lottery money to fund some portion of their education budget. Of the eleven southern states, five (Florida, Georgia, Kentucky, Louisiana, and Virginia) have state lotteries. Of the revenues generated by these lotteries roughly 35-38% are earmarked for state coffers. While Georgia and Florida's lottery proceeds are earmarked for education, Kentucky, Louisiana, and Virginia return their proceeds to the state's general fund. Other forms of gambling exist in almost every other southern state with the exception of North Carolina and Tennessee. South Carolina currently has video poker games, Alabama has greyhound racing, Mississippi has casino gambling, while Arkansas has horse racing. Apparently when forced to choose between a "sinful" activity like gambling and rasing taxes, Southerners apparently believe that sin is the lesser of the two evils.

As we prepare to move into the 21st century, education policy in the south seems to be limited games of chance. When unwilling to build an infrastructure that will fund education initiatives, it is becoming apparent that we are more than willing to gamble on our children's future.

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(mis) education ...?

Science & Math Education for the 21st Century

by George D. Nelson

In general knowledge of science and mathematics, U.S. 12th grader scores were among the lowest of 21 nations that participated in the Third International Mathematics and Science Study (TIMSS). And U.S. students taking Advanced Placement mathematics and physics courses ranked even lower when compared to their international counterparts. Bad news? Yes. New news? Decidedly not.

The fact is, the TIMSS data merely support what educators and researchers have known for decades: Most children, even the brightest, are failing to learn much that is useful in science, mathematics, and technology. But what should students be learning? How should students be taught? How should science and mathematics education be improved? Why is this important now, given today's booming economy and the lowest unemployment rate in decades? Isn't the current system working just fine?

Since 1985, Project 2061 has been helping to answer these questions. While earlier education reform efforts have focused on preparing more students for a few scientific and technical careers, Project 2061's approach grows out of the recognition that science, mathematics, and technology are major influences in the lives of all citizens, no matter what their roles in society may be. Today, nearly every career is a science and technology career.

Project 2061 is a nationwide K-12 science education reform initiative of the American Association for the Advancement of Science. A 1996 study released by the Organisation of Economic Cooperation and Development on innovations in science education around the world describes Project 2061 as the "single most visible attempt at science education reform in American history." SRI International, in a year-long evaluation of the influence of the project and its publications, credits Project 2061 for its efforts that have "changed the national climate for science education reform." But despite the successes of Project 2061 and of other reform efforts, persistent and multiple weaknesses in the complicated U.S. educational system continue to threaten our children and the nation.

To help make meaningful and long-lasting improvements, Project 2061's efforts are now focused on achieving the following key conditions for success: clear and specific learning goals for all students; curriculum materials, including textbooks and tests, aligned with these learning goals; teachers who are

well-prepared and supported to help students achieve the goals; a K-12 curriculum purposefully designed to result in science and mathematics literacy; and communities — administrations and school boards, parents, business and industry, churches, government — that understand and are committed to long-term education improvement for all students.

Science Literacy and Science for All Americans

The first step towards achieving these conditions was to envision the knowledge and skills that today's students will need as adults in the 21st century. In Science for All Americans (1989), Project 2061 presents a broad, yet clear definition of science literacy, emphasizing the connections among ideas in the natural and social sciences, mathematics, and technology. According to Science for all Americans, a science literate person is one who:

- · is familiar with the natural world.
- understands the key concepts and principles of science, mathematics, and technology.
- has a capacity for scientific ways of thinking.
- is aware of some of the important ways in which mathematics, technology, and science depend upon one another.
- knows that science, mathematics, and technology are human enterprises, and what that implies about their strengths and limitations.
- is able to use scientific knowledge and ways of thinking for personal and social purposes.

With Benchmarks for Science Literacy (1993) Project 2061 created the first set of specific recommendations for what students in grades 2, 5, 8, and 12 should know and be able to do in science, mathematics, and technology. Together, Science for All Americans and Benchmarks have sold more than 200,000 copies worldwide and have become essential re-

sources for a growing number of reform efforts abroad and a great many at the national, state, and local levels. Benchmarks has shaped the science curriculum frameworks and science standards in most states and provided the foundation for the National Science Education Standards published by the National Research Council in 1996. Educators now have a clear and coherent tool to help them decide what to include in (or exclude from) a core curriculum, when to teach it, and why.

Project 2061 is producing a coordinated set of print, CD-ROM, and on-line tools designed to help educators make changes in what and how they teach. These include Resources for Science Literacy: Professional Development (1997), Blueprints for Reform (1998), and Dialogue on Early Childhood Science, Mathematics, and Technology Education (1999). Scheduled for publication later this year are Designs for Science Literacy and Atlas of Science Literacy.

Standards-Based Curriculum and Assessment

With sound, well-accepted benchmarks for student learning now in place, Project 2061 has turned to the next task. In 1997, the National Education Goals Panel released several recommendations regarding the implementation of education benchmarks and standards to improve student achievement in science and mathematics. Calling for an independent source to "provide high quality narrative reviews of textbooks and instructional materials to schools and the public," the Goals Panel also gave high priority to identifying materials that "explain the underlying concepts in the subject area, how they balance depth and breadth, and how well they represent the subject area standards."

Project 2061 took on this challenge. With funding from the National Science Foundation and the



Carnegie Corporation of New York, the project has developed a curriculum-materials analysis procedure that is now being used to evaluate many of the most widely-used textbooks. Starting with an evaluation of math and science textbooks for the middle grades (a critical leverage point for reform efforts, according to research), the project plans to move

on to evaluate high school and then elementary school textbooks.

Results from the middle grades mathematics textbook evaluation bring both good news and bad. While a few relatively new textbooks are excellent and provide both in-depth mathematics content and strong instructional support, the textbooks used in most classrooms today are weak in their coverage of basic concepts and instructional support for students and teachers. In addi-

tion, many do little to develop more sophisticated mathematical ideas from grades 6 through 8 — something research shows can stall students' achievement, lower their interest in mathematics, and limit academic and career options in the future. A full report on the evaluation of 13 middle grades mathematics textbooks is available on-line at http://project2061.aaas.org. The science textbook review will be published later this summer.

Teachers' Key Role

Project 2061 continues to develop tools for improving science, mathematics, and technology education. To ground all of these efforts

in the realities of the classroom, Project 2061 works closely with teachers and administrators from schools and districts around the country. Out of these experiences, the project has created a unique set of workshops, seminars, and other professional development opportunities that support educators as they put benchmarks and standards to



work in their classrooms. Through Project 2061 Professional Development Programs (PDP), teachers, administrators, university faculty (and even parents and community leaders) can take part in custom-designed workshops that will show them how benchmarks and standards can be used to help all students reach their highest potential in science and mathematics.

Science Education Tomorrow

Although a healthy debate on what and how students should learn will continue at the national and local levels, one thing is clear: The nation cannot meet the challenges of the future unless today's children have a better understanding of the world and how it works. Literacy in science, mathematics, and technology is not an option for the citizens of the 21st century.

George D. Nelson is a research astronomer and director of Project 2061 of the American Association for the Advance-

> ment of Science. He flew three space shuttle missions from 1978 to 1989 while a NASA astronaut.

References

American Association for the Advancement of Science. (1989). Science for All Americans. New York: Oxford University Press.

American Association for the Advancement of Science. (1993). Benchmarks for science literacy. New York: Oxford University Press.

Atkin, J. Myron, Bianchini, Julie A.,

& Holthuis, Nicole I. (1996). The different worlds of Project 2061. Paris: Organisation of Economic Cooperation and Development.

National Research council. (1996). National science education standards. Washington, D.C.: National Academy Press.

TIMSS high school results released. (1998, April). TIMSS U.S. National Research Center Report No. 8, p. 1-2.

Zucker, Andrew A., Young, Viki M., Luczak, John. (1996). Evaluation of the American Association for the Advancement of Science's Project 2061. Menlo Park, CA: SRI International.

(mis) education . . . ?

Education Reform Issues in Massachusetts

by Michael Cudahy

In a six year glut of public spending, political squabbling and general parental discontent, education reform in Massachusetts has left the vast majority of the citizens in the Commonwealth wondering what they have received or their over \$7 billion investment.

Six years ago, State Sen. Thomas Birmingham, a major advocate of the Education Reform Act of 1993, promised that his legislation would be, "an historic and giant step forward for education in this commonwealth." State Education Commissioner Robert V. Antonucci said that we "are going to restructure how students learn." The far-reaching 97 page bill set forth a series of ambitious reforms. Funded by a massive infusion of state tax dollars, to reach \$1.3 billion annually by the year 2000, the changes include:

 A state published core curriculum of what students should know at every grade level in core subjects such as English, Science, Mathematics, History and Foreign Languages.

- A mandated, statewide, subject based test to assess students capabilities as a requirement for graduation.
- Abolition of tenure for all teachers.
- Creation of a "just cause" firing standard with arbitration appeals to simplify the firing of bad teachers.
- Establishment of a State Board of Education invested with enormous powers such as the ability to seize the worst performing schools, fire principals and teachers and invest large amounts of state money as well as to order local cities and towns to spend more.
- The establishment of "charter schools." Innovative schools funded with public money but run by groups of teachers, parents or universities.

Opponents of the education reform act said at the time that the legislation represented little real progress but was instead simply "expensive reform designed to get the political monkey off legislators' backs." Steven F. Wilson, special assistant to Governor William F. Weld said, "we are buying very little real reform. We are simply pumping money into the failed structure with a little tinkering."

Six years later, it appears that the promise of education reform was hollow and its return has been barren.

Last spring the first series of statewide, subject based testing was administered — known as the Massachusetts Comprehensive Assessment System (MCAS). The 16 hour — or longer un-timed exam was the first significant test in five years of ambitious modifications to the commonwealth's education system.

The results were a debacle.

Students in the 4th, 8th and 10th grades were tested in English, Science and Mathematics, and their performance were miserable. In every grade and in every subject, except for 8th grade English, a majority of students either did poorly or failed



outright. 50% of all 10th graders failed the math test, another 24% were in the second lowest "needs improvement level." Among 4th graders, a staggering 81% earned low marks in English. In Science, 71% scored at the lowest levels. And these results from a test that most objective observers would say was not overly difficult. A sample question from the 8th grade math test reflects the standard:

"According to the 1990 Census, the population of Massachusetts was 6,016,425. Approximately what percent of those people lived in Boston? "The population of Boston was given as

574,283 and students were offered four answers: a) 10% b) 20% c) 30% and d) 40%.

75% of 8th graders got it wrong.

To complicate matters even more, there have been three rounds of state tests administered for prospective teachers since April of last year. The Boston Globe characterized these exams as, "exams any diligent high school student should be able to ace." 45% of Massachusetts' future teachers, gradu-

ates of some of the some of the commonwealth's most respected colleges of education, failed the test.

The reaction from state legislators was not to increase the salaries of excellent teachers, nor to reexamine the credentials of questionable teachers colleges. Instead it authorized \$20,000 bonuses for new, inexperienced teachers so that teachers colleges could increase their enrollment. Education reform in Massachusetts is now caught in a dangerous triangle of conflicting power centers, with the future of public school students hanging in the balance.

On one side state legislators are working hard to explain the apparent collapse of their ambitious and highly touted legislation. Equally aggressive is the powerful Massachusetts Teachers Association (MTA) that has assessed public education

as being, "very good as a whole." Finally millions of frustrated tax-paying parents have watched the state spend \$2.3 billion, in fiscal year 1998, to bolster public schools—nearly double the amount spent in 1993, when the law was passed—with almost half the new funds being spent to support just 23 low-income schools districts that collapsed in the 1980's under weak tax bases and poor student performance.

The active word on most people's lips now is accountability.

John Silber, former Governor William Weld's Chairman of the Board of Education, has been replaced by John Peyser,

longtime education reform advocate — choice of incumbent Governor Paul Cellucci. Silber, renowned for his aggressive vision, razor sharp mind and caustic tongue had become a lightening rod in recent months and tendered his resignation in an effort to move the reform process forward.

Peyser, who has been described as "an innovative thinker partial to market-based strategies," has said that he, "would not hesitate to fire uninspired teachers, hire new management and close failing schools." In addition he has said that, "teachers and their schools must stop considering teaching jobs as entitlements." Signaling that he does not intend to back away from his long-held views on teacher accountability, Peyser has urged teacher's union officials to see students as their main

obligation. MTA president Stephen Gorrie has said that he has serious concerns about Peyser saying that his policies "could seriously damage public education."

The commonwealth is now poised for its second year of testing of public school students, teachers and schools on new curriculum frameworks.

In an effort to reduce strain on students taking the long examinations, the test will be administered in two parts. Students will take the long composition section in late April, with the balance of the test being given in late May and early June.

> Elected officials, teachers union officials and parents await the results with increasing levels of trepidation.

After half a decade of promises and massive state spending, the expectations are understandably high. Should this year's MCAS results be a repeat of the 1998 fiasco, many will undoubtedly brand the six-year education reform experiment an unmitigated disaster. The greatest concern is that the future of public education in Massa-

chusetts will become a political football, with corresponding levels of personal conflict and bureaucratic bickering.

And what about the children?

If in fact the past six years have been a total failure, how long will it take to repair the damage already done? Who will step forward and explain to the hundreds of thousands of public school children and their families that the sweeping promises of historic improvements in the education system were nothing more than empty rhetoric—and that now it will be the children left to foot the bill.

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A not So Perfect Republican World

by Charles Ellison

Republicans and conservatives alike must make quick, unhesitating choices. To avoid loss of Congressional majority and another Presidential landslide in 2000, the Party of Lincoln will need to resolve the racial image problem.

Obviously, a David Duke candidacy is highly problematic for a body politic stricken by negative publicity. Besides suffering massive political blows in polls due to the reeling impasse of impeachment, the GOP image has been devastatingly underscored by finger-points of bigotry afoul. There are cautious, shaky whispers within the GOP concerning Livingston's replacement. Shaky, because Duke is difficult to eliminate from the political picture in Livingston's open 1st District due to grass-roots support from White people [who] have been driven out," claiming Duke, observing that he's carried the district before in past Senate and Gubernatorial races. Cautious since the GOP is perceived as "anti-minority": in last year's mid-term elections, Republicans barely caught 11 percent of the complete African American vote compared to 89 percent who went Democrat. Albeit a bit more encouraging, only 37 percent of Hispanic voters went Republican — 63 percent swung left.

Conservative commentators such as David Horowitz continue claiming it's arbitrary, misguided "blind loyalty" to the left which drives Black support for Democrats. Right-leaning pundits like Armstrong Williams characterize informed Black voters as "black sheep." There are too many strategists, analysts, and commentators on the right who conveniently forget minority voters are not simply swayed by "blind" faith. Minority voters are simply reluctant to join a party where some of its most prominent members may not be in their best interests.

Recently, Senate Majority Leader Trent Lott (R-MISS) and Rep. Bob Barr (R-GA) were blind-sided by reports of forgotten ties and keynote speeches to a now infamous underground knot of proud Southern separatists known as the Conservative Citizens Council (CCC). In search of mainstream acceptance, ranking CCC officers claim Lott is an "honorary member" of the outfit. Democrats watch the political embarrassment unfold, snickering quietly about 10, even 20 seat gains sparked by a single Duke win. Black people justifiably recall brutal memories of a segregated South. Present political circumstances lead to predictable back-lashing, political consequences. Handing Democrats more fuel to throw in the fire, Republicans backed a washed-out H. Res. 121which condemned all forms of racism, in opposition to the more viable H.R. 35, introduced by Florida Democrat Robert Wexler. Rather than back H.R. 35, which specifically denounced the CCC, Republicans avoid the issue by

simply re-iterating the usual sense of the House and re-emphasizing current civil rights laws. But what was not addressed by H. Res. 121, introduced by House Republican Conference Chairman J.C. Watts

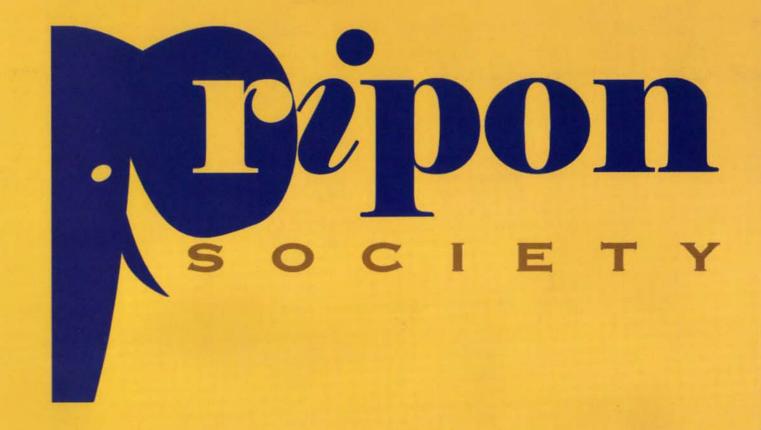
(R-OK), is the active involvement of groups such as the CCC within the GOP — a problem not experienced by the Democrats. Could this be one of the main reasons why Black Republican candidates can't get elected? And there is understandable worry that a Congressman David Duke could re-invigorate the White supremacy movement, mobilizing waves of Republican, White segregationist candidates running on separatist platforms. White and Black Republicans are overheard considering registration switches to "Independent" in the event Duke wins and gets embraced by House GOP leaders.

While Livingston and Republican National Committee Chairman Jim Nicholson emphatically condemn Republicans supporting organizations with "unacceptable views", some GOP insiders have actually dismissed such concerns describing overall minority turnout in the '98 mid-terms as "low" compared to past elections. Still, it matters not that turnout was comparatively low; what matters is that minorities are overwhelmingly voting Democrat, thereby providing decisive electoral juice to the opposition. What is also interesting is that 98 percent of Black Republican candidates lost in the mid-term cycle.

The GOP may need to also seriously investigate the extent of White-supremacist control within its ranks. But in the meantime, Republicans will need to find a message that can inspire and empower minority voters, rather than angering and alienating them. In terms of a strong, crucial Black vote, that means reconsidering racially decisive topics such as Affirmative Action and Census 2000 as crucial legislative priorities in favor of existing, energetic platforms such as tax or Social Security reform, community development, entrepreneurship and education. While spreading that message, the GOP becomes accessible and present through the Black media, churches, political and social organizations, as well as business institutions. Yes ... that takes time, money and commitment — but the eventual payoff could be enormous. To reach that point first entails immediately identifying and employing savvy, younger messengers who already carry weight and credibility within their respective communities. Republicans must identify effective leadership that can and will serve their communities in a conservative fashion.

Charles Ellison is Director of Communications for the Ripon Society in Washington, D.C.





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