Education in America: The Next 25 Years

*Irving H. Buchen**

The driving force in education in the next 25 years will be choice, fueled by changing roles for teachers, administrators, students, and entire communities.

Many people in the United States are unhappy with public education. Teachers complain about being battered and intimidated, educational administrators find themselves and their contributions unappreciated, school boards are increasingly criticized for micromanaging, parents are beset by a whole new set of alternative schooling choices, and students are being tested to death.

In spite of stresses and strains on the educational system, there is more to celebrate than to lament, especially over the long term. In short, education has a future--indeed, a significant and interesting one. If we could leap ahead 25 years to view the current educational scene, we would see four factors driving educational change: decentralization and educational options; performance evaluation and success measurement; changes in leadership and leadership roles; and reconfigurations in learning spaces, places, and times.

School Choices

Although competition arrived late in the history of education, it rapidly changed virtually everything. By offering a wide range of possibilities rather than a single focus, competition has given education a new lease on life.

Traditionally, education offered three choices: public, private, and parochial schooling. Public education dominated, and for good reason: It educated the poor and middle classes, prepared them for work or college, acculturated wave after wave of new immigrants, and provided significant employment for many professionals. Private and parochial schools continue to appeal to middle- and upper-middle-class families disenchanted with public education; homogeneous and traditional, their future is rooted in the attitudes of the past.

The variety of educational choices has dramatically increased. Home schools, for instance, enrolled an estimated 850,000 students in the United States in 1999, according to the National Center for Education Statistics, and support for this method of instruction continues to increase. Charter schools enrolled nearly 580,000 students, according to Center for Education Reform 2001 statistics. Run by different private groups in a variety of ways, charter schools receive public financial support from their home district.

Because high schools with large numbers of students can be unmanageable, school district administrators have restructured many into a series of schools within a school, each with a core of teachers serving between 100 and 150 students. Students and teachers in each smaller school know and relate to each other. Although restructuring does not alter class size, it reduces student-teacher ratio.

Private educational management companies have intensified the competitive environment of education. Often invited to take over failing schools, many of these companies are publicly owned, have stockholders, and are committed to making a profit. Although evidence for their success is mixed, they are a permanent fixture on the educational scene and add significantly to the range of available choices.

Private companies such as William Bennett's "K12" education program offer online curricula through electronic schools, so students can complete and graduate from a basic high-school program online. Electronic offerings also provide advanced placement, language, and special studies courses that normally attract few students. They are a boon to small rural districts and serve as a key underpinning for home schooling.

In short, education in 2025 will be totally decentralized, offering parents, students, adult learners, and citizens in general a dazzling menu of choices. Many people will opt for an amalgam of different educational sources that may be altered as desired. Whatever the selection, students and their parents--not schools--will drive educational choice.

Measuring Success

Major shifts will occur in the ways educational success is measured; some of these shifts are discernible now. Teachers were once evaluated on how they organized lesson plans, gained student interest, and involved the entire class in discussion. Now the focus is student achievement, usually measured by class performance on high-stakes mandated tests. Data now dominates the current educational scene, and its importance will intensify in the future.

Because allocating funds is increasingly tied to student performance, school district comptrollers often divert substantial appropriations to designing, administering, and evaluating tests, compromising instruction as a result. Many teachers, therefore, are "teaching to the test"--which would not be bad if, as one superintendent wryly observed, there was a really good test to teach to. School officials assign teams of extra teachers, tutors, and specialists to schools with low scores or failing grades, sometimes stripping the curriculum down to only tested subjects. Some schools in competitive environments advertise their test scores to attract students, further accelerating the process of constant testing. Parents have been known to request test scores of schools within a district to decide where they should send their kids.

In Florida and other states, students in schools that fail basic skills tests twice consecutively are offered financial vouchers to use in whatever school they wish. Preliminary research shows that voucher programs help drive improved student performance. Vouchers also drive choice and decentralization and significantly drain enrollment from "mainstream" schools.

A number of state governments have taken over failing schools, placing them under receivership or turning them over to private management companies. Philadelphia's school district was turned over to a private management company, Edison Schools Inc., because of poor student performance. In New York City, private management companies operate some 30 schools. Perhaps the most embarrassing consequence of this is a cynical reversal of graduation requirements in many states and schools that tie graduation to test scores. Many schools have postponed implementing requirements, lowered minimum scores, or revised graduation tests for students failing to achieve minimum scores but who were already scheduled to graduate, accepted to college, or had jobs.

The Principal's Changing Role

According to the U.S. Department of Labor, the school administration profession faces a shortage of 40,000 principals by 2005. That has been intensified by the reduction of school superintendents' terms of office to an all-time low of two to three years. Part of the difficulty of attracting administrators is that a principal's salary is not much higher than the highest paid teachers in a district; and when longer hours and more days of work are taken into account, the difference is often minuscule. As an indication of education increasingly becoming subject to business market forces, there is the trend toward hiring MBAs rather than education MAs, and even changing the title of superintendent to CEO. In fact, New York City split the top job into academic and business components. Los Angeles followed suit with an additional twist: Signaling the extent to which superintendency is increasingly political, the head of the Los Angeles school district hired a former governor of Colorado (Roy Romer) as school superintendent. But like the decentralization of schools, leadership is no longer solely of one type. The variety of leaders mirrors school choice.

Recently, the National Association of Elementary School Principals (NAESP) published a 96-page document calling for principals to be instructional leaders and to lead the charge on behalf of student achievement. To many outside the field, that might seem an odd request. Haven't

principals always done that? Actually, they seldom did because of bureaucratic, financial, and security tasks heaped on their plates.

NAESP called for appointing assistant principals to provide relief and free principals to become instructional leaders. Whether school boards with tight or reduced budgets are willing or able to increase administrative staff at a time when teaching staff is stretched has yet to be determined. But if they do, a whole new corps of principals will emerge who are far more visionary, aggressive, and knowledgeable about school reform and improvement. They will resemble their business counterparts more than principals of the past do.

Do We Really Need Principals?

Although clearly there are principals who are effective leaders no matter how burdened they are, a significant new form of management is appearing. At Chicago's McCosh School, for example, the principal and her team of teacher-managers run the school. The principal still reports to the superintendent and the board, but once she has her marching orders and budget, she and her team take it from there. How effective has that arrangement been? McCosh has the best test scores in the district, and the morale of teachers, students, and parents is high.

This arrangement has an advantage over even the most exemplary performance of a number of assertive principals: There are no subject matter or competency gaps between administration and instruction. The typical principal struggles with the handicap of being outside the classroom, perhaps for many years, and leading teachers in all subjects without possessing the credibility of pedagogical competence. But a management team of certified teachers already possesses subject matter competence. Harvard University education professor Richard Elmore calls this distributed leadership and sees it as the future of site-based management. It creates a democratized structure in which the traditional vertical management structure has been leveled to horizontal collective action.

Perhaps the most dramatic and radical version of distributed leadership is where the responsibility for running the school is in the hands of teacher-leaders and learning teams consisting of teachers, tutors, technical advisers, counselors, parents, and students. There are no principals at all. The teacher-leader oversees the team following the principle of author Robert K. Greenleaf: primus inter pares--first among equals. Being first is not fixed but rotates based on situation needs.

But perhaps the most futuristic aspect of this new development, setting it apart from other developments and standing perhaps the best chance of becoming a significant part of education in 2025, is its attention to both external and internal integration. Externally, distributed leadership unites school, parents, students, and the community. Internally, through its basic collaborative governance structure, distributed leadership aligns and combines administration, instruction, and evaluation.

Parents' New Roles

Parents are taking on more assertive roles, moving well beyond the stereotype of running bake sales. For example, parents in South Pasadena, California, serve as teacher aides and tutors. Their major task, however, is to raise substantial amounts of money annually to supplement the budget. They have successfully built and stocked a computer lab, turned the library into a state-of-the-art electronic information and resource center, and created an extensive budget for teacher professional development.

In this and other ways, parents have become leaders involved in significant and often unique school reform. One of the most promising examples is a proposal by the Parents Center for Education Reform for students to lead teacher and parent conferences. Under this arrangement, students would set the agenda and facilitate discussion about their own performance. The fact that this initiative arose from a parents' group rather than from the public education mainstream

dramatizes the extent to which parents have assumed a greater leadership role. The U.S. Department of Education officially recognizes and facilitates parental leadership through its Partnership for Family Involvement in Education.

The National Network of Partnership Schools based at Johns Hopkins University focuses on a comprehensive and aggressive plan of parent-teacher-student involvement and interaction. It features a program for teachers to generate homework assignments that require family participation. Teachers and parents use holidays and summer vacations to develop skills, anticipate academic problems, and develop solutions. All these and other efforts improve communication not only between schools and families, but also within families.

Linking Business To Education

Driven by a desire for a well-trained and motivated workforce as well as a sense of social responsibility, many CEOs have forged partnerships with schools. For example, Florida-based Paradigm Learning, which develops corporate board games, developed a high-school game called "Strive to Drive." The game takes students through all the steps of choosing, buying, financing, maintaining, and paying for a car; the game significantly and rapidly improved reading, math, and planning skills in the process. Tutor Inc., an online tutoring service, developed a partnership with the Boys Choir of Harlem, buying laptop computers for choir members to stay on top of assignments while traveling and providing access to the company's computer tutors to keep them current and on target.

The most important leadership contribution of business executives is that they are forming direct relationships with educational administrators, including sharing and exchanging different ways of effective management. Thus, the Public Education and Business Coalition received a grant to train some 100 principals in the Denver area. What business leaders discovered is that educators read and hearken only to other educators writing about education--they know little or nothing about the business world, the effect of increasing competition, the difficulty of balancing quality control with productivity--in short, precisely what education is newly encountering.

The Pearl River School in Rock-land, New York, uses a continuous improvement business model to set incremental goals for students, raising achievement every year since 1989. The number of students graduating from Pearl River with the academically rigorous state regents' diploma has jumped from 32% to 86%.

A few business CEOs are sharing libraries, research resources, and attendance at executive conferences with education CEOs. There is a strong likelihood that such business CEOs may become school superintendents in the future. If so, then education may increasingly be defined or perceived as a business.

Business leaders have created a number of organizations to support school reform, such as the Business Coalition for Educational Reform, the National Association for Partners in Education, the National Employer Leadership Council, and the School-to-Work Learning Center. Looking only to education for education leadership impoverishes the resources and sources of change.

New Learning Spaces

Seldom, if ever, do parents or citizens who already have raised and schooled their kids revisit schools. If they did, they would find many things have remained the same but some things have changed dramatically. Technological changes would top the list, but these are perhaps predictable compared with the reconfiguration of learning places, spaces, and times.

The size, holdings, and sheer physical variety of a fairly new high school are overwhelming. Built to accommodate a small town of thousands of students, a new school is surrounded by many practice and playing fields--perhaps even a football stadium--as well as extensive parking spaces for daily student use as well as for athletic events. Inside is a modern gymnasium equipped with

seats for 2,000 students and a huge auditorium with seats for 3,000 and state-of-the-art theater equipment. The library, equally enormous but generally underused, is completely computerized with relatively few real books in sight.

When demographics (especially in the suburbs) indicate a significant increase in the school-age population, municipal planners quickly draw up plans to build new school-cities. Of course, expenses for building a new school are higher than they were for building the last school, not only because of increased costs of construction and materials, but also because some communities try to outdo others by constructing bigger and more splendid high schools. Yet research studies suggest that schools can be too big and impersonal.

Extending the School Day

Once again, economics rears its ugly head when discussion of extending the school day, lengthening the school year, or reducing class size begins. In the face of severe budget cuts, many communities are naturally unwilling to extend the school calendar or reduce class size. The obvious solution is technology.

Technology can reduce class size to one student. School days can be extended easily and laptop computers mean education can continue during vacations and trips. A total tested electronic curriculum already exists. It has been used by high schools that do not have enough students to take certain advanced or specialized courses, foreign languages, or advanced placement courses. Electronic instruction has bailed out many rural schools with too few students to permit face-to-face teaching at acceptable costs. Electronics already has helped many high schools reconfigure themselves into smaller schools--within schools--by providing them with their own electronic curriculum, including specialization in arts, sciences, business, and communications. Moreover, the availability of such electronic courses has spread as a number of states bind together in electronic consortia, making their curricula available virtually without cost. Accepting technology as a legitimate and equal teaching partner will make this happen.

Student-Led Learning And Schools

Every school district placing an ad for administrators or teachers claims to have student-centered schools. Usually that means allowing students to express their views at great length, but ultimately ignoring them. Student-led schools are something else. Allowing students to conduct teacher-parent conferences is an example of a genuine learning and mastering experience for all involved, especially for the student. But many student-led schools go far beyond that.

In large part, what drives student learning is just that--student learning. The learning focus is not on different subjects but on comprehensive projects, including community-based ones. Because that requires knowledge of many subjects, an academic progression develops not unlike the system of apprenticeship. Using dialogue, mentors steer students to an initial plan to test the project. The process is subject to an incredible number of revisions. Gradually, the dominant mentor moves to the periphery as the student moves toward the center. The gradual exchange of positions signals the beginning of mastery. Only then does student leadership appear, earned through sweat equity and the accumulation of a knowledge and research base. Initially, the mentor talks and the student listens; eventually, the student talks and the mentor listens.

Such arrangements do not occur only at the high-school level or only with exceptional students. At Rover Elementary School in Tempe, Arizona, former principal Sandra McClelland explored the future of education with various organizational theorists, not just by reading materials about education. The result is not just a student-centered but a student-driven school. Student leadership teams have replaced the student council to make basic structural and political decisions. A collaborative group of teachers, students, and administrators implements the school's vision and goals. Team learning is the dominant mode; older students mentor younger ones. There is a concerted search for financial supplements and greater independence from state funds; toward that end, teachers are given, are in control of, and are accountable for their classroom

budget. Finally, a formal pedagogical partnership has been formed with Southwest Airlines: The school shares its effective and collaborative teaching strategies, Southwest its team management training. Clearly, Rover is a futures lab.

What to Expect from Education in 2025
Here are some of the most likely essential features of education by 2025.

• Education will be intensely decentralized, offering a significant number of choices to teachers, parents, and students.

• Increasingly, school and learning will be related to time rather than to place, available everywhere that there is connectivity 24 hours a day all year.

• Space and place for learning will exist for the community and no longer be reserved for the young.

• Increasingly, learners will become autonomous, almost totally free agents; nevertheless, they must earn their independence through mastery of, prescribed knowledge bases.

• Cost controls and supplemental financing will steadily take hold as municipalities divert federal, state, and local funds away from education to other social crises such as health care and the aged. Education has at most only another 10 or 15 years as the favored focus of funding and attention.

• Increasingly, teachers will be at the center of administration, instruction, and evaluation; in some programs, they may replace principals.

• Horizontal collaboration among teachers, students, and parents--rather than vertical hierarchies--will characterize school governance. A commonality of vision and purpose will be arrived at and implemented collectively.

• Parents will become indispensable to effective learning. Very busy parents may hire parent surrogates as substitutes.

• Initially, business practices will only benefit education; eventually, educational innovations will provide models for business.

• Increasingly, minorities will take over educating minorities, mostly through charter schools. They will accomplish more through chosen rather than de facto segregation, and, in the process, save a whole generation of urban kids.

MACHINE TEACHERS
Machines--computers and/or other technology--can and probably will replace teachers in the future because they can provide solid and competent instruction. However, three major obstacles continue to keep technology out of the classroom for the immediate future:

• Economics:
Education's insulation from economic and market forces has done it an enormous disservice. Economic incentives have yielded powerful, sophisticated, and flexible teaching and learning technologies, changing how we learn and acquire knowledge. Education should be at the center of these innovations, but its isolation has kept it from benefiting from technology to the fullest possible extent.

• Teacher fears:
Technology is ubiquitous, invasive, and substitutive, and most teachers know it. So they ignore technology. Nothing matches the variety and subtlety of human activity, they say; no one enlivens and inspires students better than a teacher. Teachers' objections and fears of technology are profound, the number of converts few, and the prospects for new perspectives dim.

• Critiquing technophiles:
Education cannot reaffirm its traditional position or stake its future role without asking substantive questions (What problem does this technology solve? What new problems does it create? that challenge the technology community and incorporating these questions into teaching. Challenging and critiquing technophiles will result in the best of both worlds, where education asks the questions and technology performs the tasks. If this partnership falters or fails, there is little doubt that technology will fill the vacuum and appear as both educator and performer.

Creating technologically savvy teachers as well as machines to serve as teachers depends on examining these obstacles. Whether the change will be gradual, accelerated, or radical depends on how fast we overcome them.

RESOURCES FOR DISTANCE LEARNING
The following Web sites offer information on distance-learning opportunities for students:

Distance Learning Exchange
(www.dle.state.pa.us) is a free Web-based clearinghouse of distance learning and Internet project opportunities. It includes a directory listing individuals or groups who provide distance-learning activities.

Jefferson County, Colorado, Public School District
(jeffcoweb.jeffco.k12.co.us) offers online courses nationwide. Students participate in numerous group interactions in real time with other students, teachers, and mentors.

Laurel Springs School (www.laurelsprings.com) integrates home schooling, independent study, distance learning, and virtual schooling into a personalized educational experience.

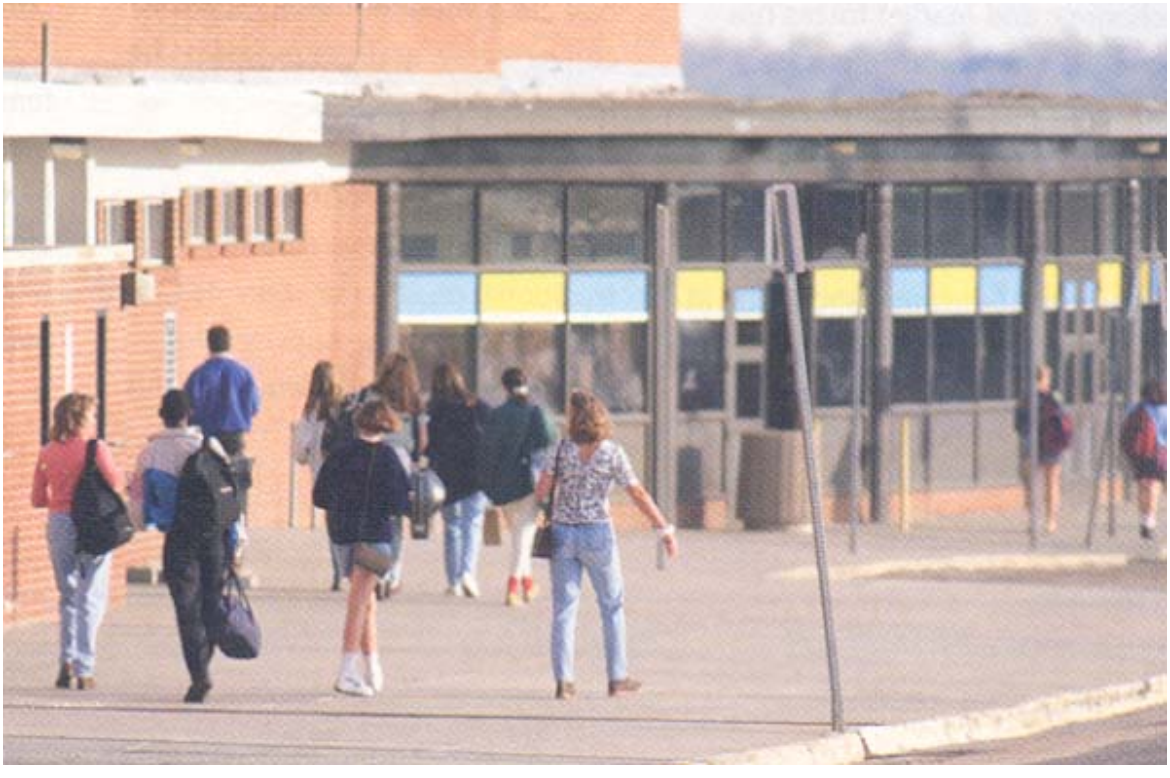
The Internet Academy (www.iacademy.org) provides learning opportunities meeting state standards for students anywhere.

The Babbage Net School (www.babbagenetschool.com) is a virtual high school offering courses taught in a highly interactive classroom by certified teachers.

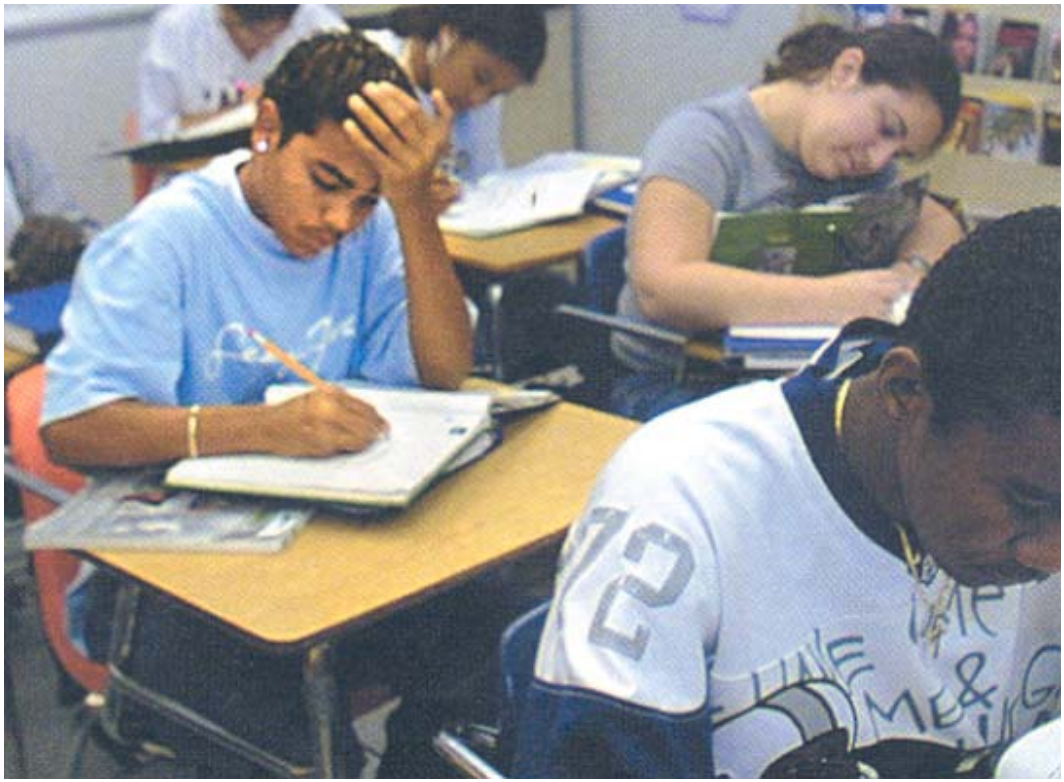
Issues to consider when selecting an online program include the parent organization's credentials, qualifications of the teaching staff, assignment and assessment of student work, course structure and administration, and whether the college of your choice will recognize courses.

Sources: U.S. Distance Learning Association, 8 Winter Street, Suite 508, Boston, Massachusetts 02108. Web site www.usdla.org.

Distance Learning Resource Network, 2020 North Central Avenue, Suite 660, Phoenix, Arizona 85004. Web site www.dlrn.org.



High school students walk to class. In 2025, author Irving Buchen predicts, schools and their facilities will serve entire communities and not simply the student population. Everyone will have access to libraries and computers as well as gymnasiums and auditoriums.



A ninth-grade class in an intensive reading program in Parkland, Florida, works on a writing assignment. Breaking assignments down into their component parts and grading each step will be one way of evaluating student success in the near future, says author Buchen.

Education benefits from partnership with business. Ken Cameron, General Motors program executive and former astronaut, demonstrates how a fuel cell works to students at Jackie Robinson Junior High in Manhattan. This successful partnership between business and education is expected to reach nearly 3.5 million students.

A private school girl wends her way to class. Private schools appeal to middle and upper middle classes disenchanted with public education, according to author Buchen.

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