National concerns linking education and economic development have been stated in "America 2000: An Education Strategy." The America 2000 strategy represents the direction to educational and economic reform in a metaphor of four trains leaving a station on four parallel tracks. However, this misses the point that the tracks are actually related. The Workforce Education and Lifelong Learning (WELL) Strategy emphasizes the interrelatedness of all four of the tracks in the America 2000 strategy. The WELL Strategy addresses the call for educational reform in the schools through reform of education for adults. Track Three, adult education, particularly the education of adults in the work force, is seen as the fulcrum to lever the achievement of the other three tracks because the education of adults transfers intergenerationally to improve the educability of children, makes adults more productive, increases the tax base, and hence provides for better schools and safer communities. (Appendixes include nine references and a figure that depicts adult education as the central point for new investments in education.) (YLB)
The WELL Strategy

Workforce Education & Lifelong Learning
for Education and Economic Reform

A Project of the

San Diego Consortium for Workforce Education & Lifelong Learning (CWELL)

Applied Behavioral & Cognitive Sciences, Inc.
San Diego Community College District, Division of Continuing Education
San Diego State University, College of Education

January 1993
The WELL Strategy:  
Workforce Education and Lifelong Learning for Education and Economic Revival

Abstract

Like the rest of the nation, San Diego is concerned about its economic future. Jobs are disappearing. Thousands of highly educated and skilled adults find themselves in the ranks of the unemployed. The thousands of highly skilled unemployed unexpectedly find themselves among the hundreds of thousands of adults who are so lacking in education and skills that they can only hope for the lowest skill, lowest wage jobs - if they can find a job at all. National concerns linking education and economic development have been stated in President Bush's *America 2000: An Education Strategy*. The America 2000 strategy represents the direction to educational and economic reform in a metaphor of four trains leaving a station on four, parallel tracks. But this misses the point that the tracks are actually related. The WELL (Workforce Education and Lifelong Learning) Strategy emphasizes the interrelatedness of all four of the tracks in the America 2000 strategy. It is argued that Track Three, adult education, particularly the education of adults in the workforce, is the fulcrum to lever the achievement of the other three tracks because the education of adults transfers intergenerationally to improve the educability of children, makes adults more productive, increases the tax base and hence provides for better schools and safer communities. In short, investment in adult education is seen as the key to both economic and education revival.

The Workforce Education and Lifelong Learning (WELL) Strategy for Education and Economic Reform

The WELL Strategy addresses calls for educational reform in the schools through reform of education for adults. Because most adults are in the workplace, the WELL Strategy takes an approach that stimulates the creation of a new world of work in which employees are empowered, educated and trained to operate at a much higher level of skills than is currently the case. The WELL Strategy plans for a positive cycle to occur such that, as the skills of the workforce are improved, there is demand by workers for more intellectually demanding workplaces that entail more collaboration and more shared decision-making with management. Then, it is anticipated that, as there is a shift away from the "assembly line" mentality in the workplace, there will be a corresponding demand for a reduced "assembly line" mentality in the schools.

The Workforce 2000 Study. Perhaps the most important report that added a significant new dimension to the issue of educational reform and workforce competitiveness, and stimulated the eventual conception of the WELL Strategy was the 1987 report by the Hudson Institute entitled, "Workforce 2000: Work and Workers for the Twenty-First Century". What the labor economists pointed out in that report was that, even if public school reform could be rapidly accomplished, it would have little influence on workplace productivity in the next twenty years because out-of-school youth and adults are not subject to school reforms and they will constitute more than three-quarters of the workforce of the year 2000.

Adult Skills Assessments. This new appreciation of the importance of the present workforce to the nation's competitiveness posture of the next century focussed attention on programs for the education and training of out-of-school youth and adults. Of special concern was youth and adult "literacy" or "basic skills." The Nation at Risk report had suggested that some 13 percent of high
school leavers were "functionally illiterate." In 1986 the National Assessment of Educational Progress (NAEP) published the results of a national survey of the literacy skills of young adults 21 to 25 years of age. It reported that one in five failed to meet the eighth grade standard for functional literacy established a quarter century earlier in the War on Poverty. The Work in America Institute reported data suggesting that over fifty percent of young adults aged 18 to 23 in 1980 had literacy skills below those of the beginning tenth grader, while one in twenty had skills below that of a fifth grade child.

The Commission on the Skills of the American Workforce. This Commission reported in June, 1990 the results of a year-long study of the productivity of the American workforce in relation to that of other, strongly competitive nations. They concluded that the American workplace is too often designed to remove the requirements for the use of complex actions by workers, following the "scientific management" approach of the early industrial age. This approach produces the assembly line type of work in which workers perform one prescribed action, make no decisions and management does all the thinking.

Competitor nations, on the other hand, were found to be using a "high performance" approach to work in which many complex actions and decisions are pushed "down" from management to line workers. The use of "focus factory" or "total business" schemes in manufacturing, for instance, requires line workers to take-on responsibility for an entire product. This means contacting customers, taking orders, obtaining raw materials in just enough supply to meet present needs, but not so much as to require expensive warehousing, negotiating in the work team, to prepare production schedules, producing a product, performing quality control on the product, packaging and shipping the product to the customer.

The Commission recommended that American industry provide much more education and training for the existing workforce, and that a new educational system for children and adults be developed that would provide "high performance" schools. In this system, all children would be permitted to strive for a "Certificate of Initial Mastery" by age sixteen. This Certificate would certify the student as work-ready for entry level jobs in high performance businesses.

For students "at risk" for dropping out of school, a "Youth Center" school separate from the regular secondary school would be established. Such Centers would offer apprenticeship programs or other types of part-school, part-work programs to help students make the transition from school to work.

Then, once on the job, Certificates of Advanced Mastery would be available to provide incentives for workers to strive to complete more education and training to develop higher levels of competence. Promotions and pay raises would then be based on competence, rather than on seniority as in many companies.

The Secretary's Commission on Achieving Necessary Skills (SCANS). Following-up on the recommendation's of the Commission on the Skills of the American Workforce, the Secretary of Labor in 1990 established the SCANS to identify the skills necessary for productive work in high performance businesses and industries. These skills, once identified, and subjected to modifications based on national forums, are to form the basis for the Certificates of Initial Mastery recommended by the Commission on the Skills of the American Workforce. With these skills and certification procedures identified, the SCANS aims to provide a stimulus for schools to transform themselves from the "assembly line" models that reflect "assembly line" workplaces, to "high performance" schools that resemble "high performance" workplaces.

The National Education Goals and the Intergenerational Cycle of Cognitive Development. Reflecting the national mood for educational reform across the lifespan to make the U. S. more competitive in the new world economic order, the nation's fifty Governors and the President in February of 1990 adopted six ambitious national education goals (see Figure 1).
Again, reflecting the newly recognized importance of adult education in improving national competitiveness and in reforming the schools through parental involvement, half of these goals concern adult education and the adults' role in the education of their children.

The first of the goals calls for all American children to be prepared by parents at home and in the community to be ready for learning in school by the time they are school age. The second, third and fourth goals pertain to reform efforts in the K-12 school system. The fifth goal states, "By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship." The sixth goal calls for every school in America to be free of drugs and violence and to offer a disciplined environment conducive to learning. It calls for parents, businesses and community organizations to form teams to work together to achieve this goal.

Goals one, five, and six focus on the role of adults and the community in the education of each new generation of citizens. Adults themselves need to be highly educated so that as parents they may prepare their children for learning in school. They need skills and knowledge so that they can individually compete for well-paying jobs and serve as members of a world-class workforce that can compete for high-wage jobs in the new world economic order. And they need to constitute a social community that controls violence, drug abuse, and is conducive to learning both in and out of school.

AMERICA 2000: An Education Strategy. In what is more or less the culmination of the various efforts that have forged an interest in adult education as a major part of our nation's human resources development efforts, on April 18, 1991, President Bush announced AMERICA 2000: An Education Strategy. This is a four-track strategy for revitalizing American education for the 21st century. Significantly, while the strategy does emphasize improving the K-12 education system, two of the four tracks are concerned with the education of out-of-school adults.

Track III of AMERICA 2000 is entitled For the Rest of Us (Yesterday's Students/Today's Workforce): A Nation of Students. In a move to transform the United States from a "Nation at Risk" to a "Nation of Students," this part of the strategy states that

Eighty-five percent of America's work force for the year 2000 is already in the work force today, so improving schools for today's and tomorrow's students is not enough to assure a competitive America in 2000. And we need more than job skills to live well in America today. We need to learn more to become better parents, neighbors, citizens and friends. Education is not just about making a living; it is also about making a life.

That is why the President is challenging adult Americans to "go back to school" and make this a "Nation of Students." For our children to understand the importance of their own education, we must demonstrate that learning is important for grown-ups, too. We must "go back to school" ourselves. The President is urging every American to continue learning throughout his or her life, using the myriad formal and informal means available to gain further knowledge and skills.

Track III goes on to recommend that business and labor establish job-related skill standards built around core proficiencies, such as those identified by the SCANS, that can form the basis for "skill certificates" to be awarded to youth and adults who qualify and that skill "clinics" be established in every large community where people can find out how well their present skills compare with those they would like to have for working in various jobs and where they can acquire the skills and knowledge they need.
The Track III statement states that Federal agencies will set an example for other employers by embarking upon a government-wide program of skill upgrading and the nation's adult education efforts will be strengthened by the specification of performance standards for all federally aided programs and making programs accountable for meeting these standards.

The "Learning Community." Track IV of America 2000 calls for the creation of drug-free, non-violent communities where learning can happen. This Track points out that there are limits to what the government and schools can accomplish.

Government at every level can play a useful role, and it is incumbent upon all of us to see that this is done efficiently and adequately. But much of the work of creating and sustaining healthy communities - communities where education really happens - can only be performed by those who live in them: by parents, families, neighbors and other caring adults; by churches, neighborhood associations, community organizations, voluntary groups and the other "little platoons" that have long characterized well-functioning American communities. Such groups are essential to building relationships that nurture children and provide them with people and places to which they can turn for help and guidance.

To accomplish the development of learning communities, America 2000 emphasizes the importance of individual responsibility.

Increased attention will be focused on adult behavior, responsibility for children and family, and community values essential for strong schools. This includes involving parents as teachers of their children and as school partners.

The WELL Strategy

The AMERICA 2000 education strategy is presented as a series of four, separate, parallel tracks. However, this conceptualization is not valid because, in fact, the four tracks are interrelated. In Figure 1 a new conceptualization of the National Education Goals and the AMERICA 2000 strategy is presented that explicitly recognizes the interrelationships among the six education goals and the four tracks of the AMERICA 2000 strategy.

The WELL Strategy places Track 3, becoming a nation of students, with an emphasis upon workforce education and adult lifelong learning, as the number one priority for human resources development that can lead to both economic and education reform. This is based on four interrelated consequences that result from improvements in the education of adults.

(1) Better Educated Adults Produce Better Educated Children. As illustrated in Figure 2, parents', and especially mothers' education levels are related to the development of children's learning abilities before school (Goal 1), during school (Goals 2,3,4), and into adulthood (Goal 5). This suggests that adult education should be emphasized in a human resources development policy because such education may provide "double duty dollars." That is, it may affect not just the adults, but also their children, and hence the next generation of workers when the adult's children grow-up.8

(2) Better Educated Adults are More Productive on the Job. This is one of the reasons the military services try to recruit high school graduates who achieve above the median on the Armed Forces Qualification Test. The Commission on the Skills of the American Workforce and The Secretary's Commission on Achieving Necessary Skills (SCANS) both advocate the development of a high skilled workforce as a means of stimulating more businesses and industries to adopt high performance work practices that empower workers to make decisions,
interact with customers, and participate as members of worker-management teams. The aim is to increase the productivity of workplaces so that businesses may compete better in the international marketplace.9

(3) Better Educated Adults Produce Safer Communities Conducive to Learning. The Workforce Education and Lifelong Learning (WELL) Strategy aims not only to prepare people for productive work, but also to produce drug and violence free schools (Goal 6) and better "learning communities" (Track 4) that produce more highly skilled citizens who can attract more high performance, better paying jobs. From this point of view, workforce education aims not only to prepare people for an existing world of work, but also to stimulate the creation of a new world of work in which employees are empowered to participate in lifelong learning activities and to operate at a much higher level of cognitive and interpersonal skills than is currently the case both in and outside the workplace. Communities of better educated adults who are workers, citizens, and parents attract high technology, high wage jobs into the community, provide a higher tax base that will support better schools and better social services (law enforcement; adult education and training; day care; recreational facilities, etc.), and promote a safer, supportive community that can produce drug and violence free schools and influence better teaching and greater success for children in school (Track 1).

(4) Better Educated Adults Demand and Get Better Schools. A major feature of the WELL Strategy is that focusing on Track 3 may lead to reform of the schools (Track 2). The hypothesis is that through investments in adult education in the workplace, workers will eventually demand and employers will develop more cognitively demanding, high performance workplaces in which employees are engaged in high order, collaborative, decision making skills along with management. Then, since the schools largely model themselves after the world of work, as they did in adopting the "scientific," "assembly line" schools fractionated into grade 1, 2, etc., after the industrial revolution, it is expected that schools will transform themselves into "high performance" organizations in which teachers, students and management collaborate in higher order decision making and management of the learning process. This will happen, it is hypothesized, when schools realize that they can no longer provide graduates with "assembly line" mentalities for new, "high performance" workplaces. Instead, they must provide "high performance" mentalities for "high performance" work.

Following the WELL Strategy, greater investments in workforce education and more opportunity for lifelong learning provide the fulcrum for leveraging the economic and educational reforms needed to move the nation prosperously and humanely into the next century.

References


Getting WELL:
The Workforce Education and Lifelong Learning Strategy
For Improving Productivity At Work, Home, & School

National Education Goals: By the Year 2000:
1. All children in America will start school ready to learn.
2. High school graduation rate will increase to 90 percent or more.
3. In school children will demonstrate competency in challenging subjects.
4. U.S. students will be first in the world in science and mathematics.
5. Every adult American will be literate and possess competence to compete in a global economy and exercise rights and responsibilities of citizenship.
6. Every school in America will be free of drugs and violence and offer an environment conducive to learning.

America 2000: An Education Strategy
"Four big trains, moving simultaneously down four parallel tracks: Better and more accountable schools; a New Generation of American Schools; a Nation of Students continuing to learn throughout our lives; and communities where learning can happen."

Track 1 Better Schools
Track 2 New Generation of Schools
Track 3 A Nation of Students
Track 4 Learning Communities

The WELL Strategy for Educational and Economic Reform

HOME
Goal 1
(3) More Skilled Parents Improve Preschool Skills of Children
(4) Children Enter School Better Prepared To Learn

SCHOOL
Goals 2, 3, 4

WORK
Goals 1, 2, 3, 4, 5, 6
(1) Improve Skills of Employees/Parents
(2) Improved Skills of Employees/Parents/Citizens

COMMUNITY
Goals 1, 6

Attracts More High Wage Jobs
Safer/Nurturing Communities
Leads to Better Support of Education

Figure 1. The WELL Strategy corrects the America 2000 Strategy and shows Adult Education, Track 3, is the central point for new investments in education. The adult's education then affects homes, schools, communities as well as workplaces. It affects both the present and future workforce.
The Intergenerational Transfer of Literacy

Figure 2. Performance of young adults on the Reading Proficiency scale of the National Assessment of Educational Progress's profile of literacy (1986) and the Department of Defense's profile of reading and mathematics on the Armed Forces Qualification Test (AFQT) in the 1980 renorming of the Armed Services Vocational Aptitude Battery as a function of mother's education level. After the person's own years of education, mother's years of education is the best predictor of her children's achievement in education and their performance on achievement tests such as the NAEP and the AFQT. Father's education is also correlated with their children's subsequent achievement in school and on tests, but not to as great a degree. These data suggest that adult education may have an intergenerational impact on children's educational achievement.