

A close-up, vertical view of the American flag, showing the stars and stripes. The flag is slightly out of focus, with the colors appearing soft and blended. The stars are visible in the upper left corner, and the stripes run vertically down the page.

EXECUTIVE SUMMARY

# TOUGH CHOICES *OR* TOUGH TIMES

THE REPORT OF THE *new* COMMISSION ON  
THE SKILLS OF THE AMERICAN WORKFORCE

NATIONAL CENTER  
ON EDUCATION  
AND THE ECONOMY

#### **WHERE TO GET COPIES OF THE FULL REPORT**

This report, in book form, was published by Jossey-Bass, a Wiley Imprint, [www.josseybass.com](http://www.josseybass.com) and is available through bookstores, Amazon.com, other internet book retailers and on the Commission's Web site. Other materials relating to the report, including various research reports done by the staff and others to support the work of the Commission can be accessed through the Commission's Web site at [www.skillscommission.org](http://www.skillscommission.org)

## IN PRAISE OF *Tough Choices or Tough Times*

“While *Tough Choices or Tough Times* does a tremendous job in identifying and articulating the challenges we face, what truly sets it apart is the specific and highly innovative policy prescriptions it advocates to reverse the “education deficit.” I encourage every policymaker, at every level, to read this compelling and comprehensive report.” —WILLIAM E. KIRWAN, CHANCELLOR, UNIVERSITY SYSTEM OF MARYLAND

“*Tough Choices or Tough Times* is must reading for policymakers, educators, businesspeople, and citizens who want America to be prosperous and competitive in the 21st century. The report pulls no punches about the economic threats facing our country. The Commission advances thought-provoking recommendations that should stimulate debate and then galvanize every sector of society to muster the will to ensure that America’s workforce is the best educated and prepared in the world.” —HUGH PRICE, SENIOR FELLOW, BROOKINGS INSTITUTION, AND FORMER PRESIDENT, NATIONAL URBAN LEAGUE

“*Tough Choices or Tough Times* provides a bold and specific road map for transforming all levels of education—preschool through postsecondary education—to meet the challenges of a rapidly changing global economy. It calls for massive fundamental change in education structure, curriculum, teacher compensation, and assessment, as well as in the roles of virtually all our education institutions.” —MIKE KIRST, PROFESSOR OF EDUCATION EMERITUS, STANFORD UNIVERSITY

“The steps proposed in *Tough Choices or Tough Times* will move us dramatically forward, fostering a 21st century skills development pipeline that meets the needs of working adults, and enables them to engage in the lifelong learning necessary to meet the changing demands of the workplace.” —MARLENE SELTZER, PRESIDENT AND CEO, JOBS FOR THE FUTURE

“The Commission provides a 21st century formula for workforce development: think regional, eliminate structures that no longer serve our needs, and create universal access to quality education and training.” —JOSEPH CARBONE, PRESIDENT AND CEO, THE WORKPLACE, INC., SOUTHWESTERN CONNECTICUT’S WORKFORCE DEVELOPMENT BOARD

“Efforts at bringing together the three integral components of a successful workforce investment system—education, training, and economic development—have been haphazard at best. The recommendation to encourage the creation of high level jobs/skills/economic growth authorities with the ability to issue tax exempt bonds holds real promise for the development of a rational, sustainable, and politically supportable system.” —MARION PINES, DIRECTOR, SAR LEVITAN CENTER, JOHNS HOPKINS UNIVERSITY

“Anyone who hopes to hold a job in the next several decades should read—if not memorize—this extraordinary report. Hopefully the report will motivate our nation’s leaders to promptly take the steps needed to assure that our nation’s citizenry can enjoy a decent quality of life in the years ahead.” —  
NORMAN R. AUGUSTINE, RETIRED CHAIRMAN AND CEO, LOCKHEED MARTIN CORPORATION,  
AND CHAIRMAN, THE NATIONAL ACADEMIES’ COMMITTEE ON PROSPERING IN THE GLOBAL  
ECONOMY OF THE 21ST CENTURY

“*Tough Choices or Tough Times* is an exciting vision of a reformed and revitalized American education system. It has many important ideas that should generate considerable debate and are worthy of serious consideration.” —SUSAN FUHRMAN, PRESIDENT, TEACHERS COLLEGE, COLUMBIA UNIVERSITY

“*Tough Choices or Tough Times* calls into question whether we are willing to invest in the future of America’s workforce.” —BOB GILOTH, DIRECTOR, FAMILY ECONOMIC SUCCESS, ANNIE E. CASEY FOUNDATION

“This penetrating, scary analysis and astute, far-reaching recommendations amount to *A Nation at Risk* for the next generation, a brave, clear call for top-to-bottom reforms in U.S. education. While overturning plenty of creaky applecarts, *Tough Choices* sketches a bold and efficient new vehicle for equipping 21st century Americans with the skills and knowledge they will need—and that the nation needs.”  
—CHESTER E. FINN JR., SENIOR FELLOW, HOOVER INSTITUTION, STANFORD UNIVERSITY,  
AND PRESIDENT, THOMAS B. FORDHAM FOUNDATION

“The Commission’s report joins a chorus of voices warning us of the looming consequences facing our nation because of the poor level of preparation of students and members of the workforce. What is different is that this report recommends bold steps for action. To do any less will result only in more half-measures that over time have had too little effect and have left us vulnerable as we face growing competition in a changed world economy.” —G. WAYNE CLOUGH, PRESIDENT, GEORGIA TECH,  
AND VICE CHAIRMAN, U.S. COUNCIL ON COMPETITIVENESS

“This is a remarkably bold and refreshing report. It is time for us to stop tinkering at the edges of the educational enterprise. What I find most appealing about the Commission’s recommendations is that it represents a total overhaul of how we do the business of education. The Commission is telling us that we need to stop rearranging the deck chairs on the Titanic, reinvest the resources we have, and turn the ship in a new direction.” —JAMES W. PELLEGRINO, DISTINGUISHED PROFESSOR OF COGNITIVE  
PSYCHOLOGY AND EDUCATION, UNIVERSITY OF ILLINOIS AT CHICAGO

“The current public education system at the K–12 level is broken. Can it be fixed? This report says no, it has to be replaced. This is more than a wake-up call. It is a call to arms. The reasons to be alarmed are clearly and persuasively documented. Out-of-the-box, stretch recommendations are offered.” —ALBERT  
J. SIMONE, PRESIDENT, ROCHESTER INSTITUTE OF TECHNOLOGY

# EXECUTIVE SUMMARY

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When the report of the first Commission on the Skills of the American Workforce, *America's Choice: high skills or low wages!*, was released in 1990, the globalization of the world's economy was just getting underway. That Commission understood the threat in the straightforward terms captured in the report's subtitle. A worldwide market was developing in low-skill labor, it said, and the work requiring low-skills would go to those countries where the price of low-skill labor was the lowest. If the United States wanted to continue to compete in that market, it could look forward to a continued decline in wages and very long working hours. Alternatively, it could abandon low-skill work and concentrate on competing in the worldwide market for high-value-added products and services. To do that, it would have to adopt internationally benchmarked standards for educating its students and its workers, because only countries with highly skilled workforces could successfully compete in that market.

A swiftly rising number of American workers at every skill level are in direct competition with workers in every corner of the globe.



If someone can figure out the algorithm for a routine job, chances are that it is economic to automate it. Many good well-paying, middle-class jobs involve routine work of this kind and are rapidly being automated.

The first Commission never dreamed that we would end up competing with countries that could offer large numbers of highly educated workers willing to work for low wages. But China and India are doing exactly that. Indeed, it turns out that China and India are only the tip of the iceberg. Whereas for most of the 20th century the United States could take pride in having the best-educated workforce in the world, that is no longer true. Over the past 30 years, one country after another has surpassed us in the proportion of their entering workforce with the equivalent of a high school diploma, and many more are on the verge of doing so. Thirty years ago, the United States could lay claim to having 30 percent of the world's population of college students. Today that proportion has fallen to 14 percent and is continuing to fall.

While our international counterparts are increasingly getting more education, their young people are getting a better education as well. American students and young adults place anywhere from the middle to the bottom of the pack in all three continuing comparative studies of achievement in mathematics, science, and general literacy in the advanced industrial nations.

While our relative position in the world's education league tables has continued its long slow decline, the structure of the global economy has continued to evolve. Every day, more and more of the work that people do ends up in a digitized form. From X-rays used for medical diagnostic purposes, to songs, movies, architectural drawings, technical papers, and novels, that work is saved on a hard disk and transmitted instantly over the Internet to someone near or far who makes use of it in an endless variety of ways. Because this is

so, employers everywhere have access to a worldwide workforce composed of people who do not have to move to participate in work teams that are truly global. Because this is so, a swiftly rising number of American workers at every skill level are in direct competition with workers in every corner of the globe. So it matters very much that, increasingly, it is easier and easier for employers everywhere to get workers who are better skilled at lower cost than American workers.

Another important trend in the global economy bears on this point. A century ago, the United States led the world in the process of vertical integration, where corporations performed every function necessary to get their products to market, from the mining of the raw materials right through to the sale of those products through retail outlets to the final customer. Today, the United States is once again a leader, this time in the deconstruction of the vertically integrated firm. Corporate analysts identify each step in the process and ask whether the firm is a leader in that step, and, if not, who in the world can do that work at the needed level of quality at the lowest possible cost. The firm then contracts with the best providers of each of those services and keeps only those functions that it can do best. This is outsourcing. Firms that do not do this will inevitably be put out of business by firms that do. In this way, many functions that have always been performed by American workers in American firms will be outsourced to workers in other countries who do them better and cheaper.

In many cases, the work will be done not by people in other countries, but rather by machines. With the rapid advance of new

technologies, it is becoming progressively less expensive to automate functions that used to be performed by people. As the cost of labor rises and the cost of automating jobs continues to fall, it becomes both possible and necessary for firms simply to eliminate job after job now being done by humans. Earlier, almost all the jobs subject to automation were low-skill jobs. That is no longer true. Now it is more accurate to say that the jobs that are most vulnerable are the jobs involving routine work. If someone can figure out the algorithm for a routine job, chances are that it is economical to automate it. Many good, well-paying, middle-class jobs involve routine work of this kind and are rapidly being automated.

In this environment, it makes sense to ask how American workers can possibly maintain, to say nothing of improve, their current standard of living. Today, Indian engineers make \$7,500 a year against \$45,000 for an American engineer with the same qualifications. If we succeed in matching the very high levels of mastery of mathematics and science of these Indian engineers — an enormous challenge for this country — why would the world's employers pay us more than they have to pay the Indians to do their work? They would be willing to do that only if we could offer something that the Chinese and Indians, and others, cannot.

Those countries that produce the most important new products and services can capture a premium in world markets that will enable them to pay high wages to their citizens. In many industries, producing the most important new products and services depends on maintaining the worldwide

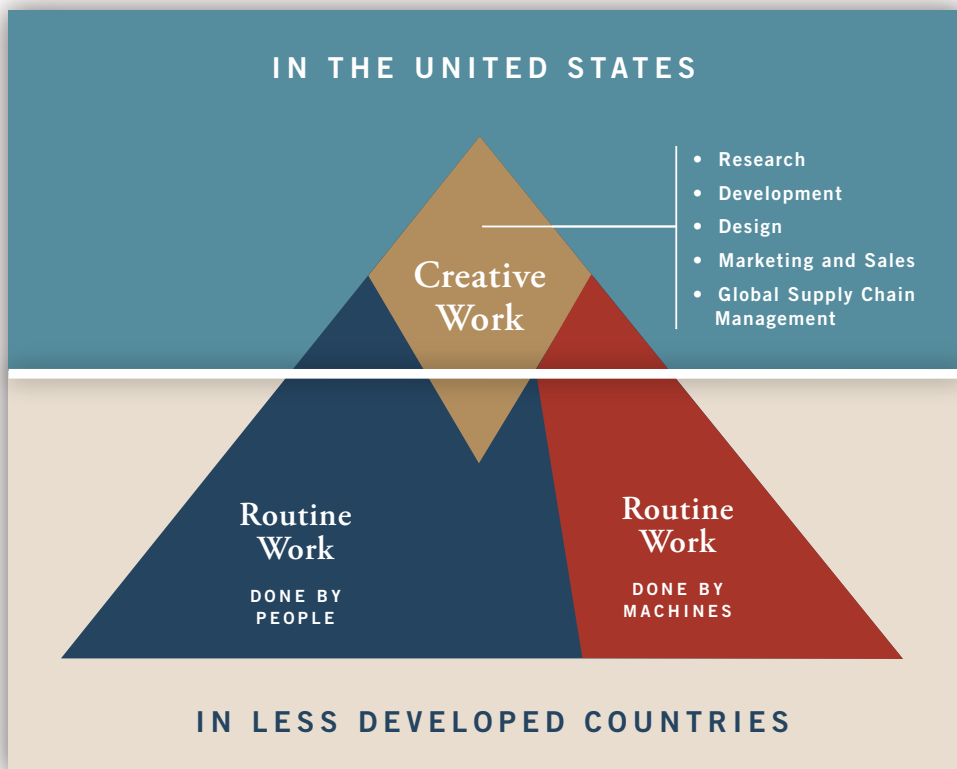
technological lead, year in and year out, in that industry and in the new industries that new technologies generate. But that kind of leadership does not depend on technology alone. It depends on a deep vein of creativity that is constantly renewing itself, and on a myriad of people who can imagine how people can use things that have never been available before, create ingenious marketing and sales campaigns, write books, build furniture, make

movies, and imagine new kinds of software that will capture people's imagination and become indispensable to millions.

This is a world in which a very high level of preparation in reading, writing, speaking, mathematics, science, literature, history, and the arts will be an indispensable foundation for everything that comes after for most members of the workforce. It is a world in which comfort with ideas and abstractions is

## PROTOTYPICAL U.S. INDUSTRY

*in 10 years if all goes well*





the passport to a good job, in which creativity and innovation are the key to the good life, in which high levels of education — a very different kind of education than most of us have had — are going to be the only security there is.

A world in which routine work is largely done by machines is a world in which mathematical reasoning will be no less important than math facts, in which line workers who cannot contribute to the design of the products they are fabricating may be as obsolete as the last model of that product, in which auto mechanics will have to figure out what to do when the many computers in the cars they are working on do not function as they were designed to function, in which software engineers who are also musicians and artists will have an edge over those who are not as the entertainment industry evolves, in which it will pay architects to know something about nanotechnology, and small businesspeople who build custom yachts and fishing boats will be able to survive only if they quickly learn a lot about the scientific foundations of carbon fiber composites.

It is a world in which the rewards will go to the marketing director who sees the opportunity to build a global business in cars selling for \$2,000 each, where others see only poor people who can't afford cars; the clothing designer whose grasp of the direction of fashion is uniquely matched to her understanding of the new fabrics that the new technologies are making possible, and creates the perfect match of fabric and taste . . .

The best employers the world over will be looking for the most competent, most creative, and most innovative people on the face of the earth and will be willing to pay them top dollar for their services. This will be true not just for

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The best employers the world over will be looking for the most competent, most creative and most innovative people on the face of the earth and will be willing to pay them top dollar for their services. This will be true not just for the top professionals and managers, but up and down the length and breadth of the workforce. Those countries that produce the most important new products and services can capture a premium in world markets that will enable them to pay high wages to their citizens.

That kind of leadership does not depend on technology alone. It depends on a deep vein of creativity that is constantly renewing itself. Now many students just slide through high school, because they know that all they have to do is get passes in their courses or a satisfactory score on an 8th or 9th grade level literacy test to go to college. With this system, they will know that they have to work hard in school to get anywhere, and, the evidence shows, that is exactly what they will do.



The core problem is that our education and training systems were built for another era. We can get where we must go only by changing the system itself.

the top professionals and managers, but up and down the length and breadth of the workforce.

Strong skills in English, mathematics, technology, and science, as well as literature, history, and the arts will be essential for many; beyond this, candidates will have to be comfortable with ideas and abstractions, good at both analysis and synthesis, creative and innovative, self-disciplined and well organized, able to learn very quickly and work well as a member of a team and have the flexibility to adapt quickly to frequent changes in the labor market as the shifts in the economy become ever faster and more dramatic.

If we continue on our current course, and the number of nations outpacing us in the education race continues to grow at its current rate, the American standard of living will steadily fall relative to those nations, rich and poor, that are doing a better job. If the gap gets to a certain — but unknowable — point, the world's investors will conclude that they can get a greater return on their funds elsewhere, and it will be almost impossible to reverse course. Although it is possible to construct a scenario for improving our standard of living, the clear and present danger is that it will fall for most Americans.

The core problem is that our education and training systems were built for another era, an era in which most workers needed only a rudimentary education. It is not possible to get where we have to go by patching that system. There is not enough money available at any level of our intergovernmental system to fix this problem by spending more on the system we have. We can get where we must go only by changing the system itself.

To do that, we must face a few facts. The first is that we recruit a disproportionate share

of our teachers from among the less able of the high school students who go to college. The second is that we tolerate an enormous amount of waste in the system, failing our students in the early years when the cost of doing the job right would be relatively low, and trying to remediate it later at much higher cost. The third is that this inherently inefficient system has gotten progressively more inefficient over time. While the standards movement has produced real gains, especially for minority students, in recent years, those gains have been leveling off, and the gains have been modest in relation to the increase in per pupil expenditures over the last thirty years. The fourth is that the growing inequality in family incomes is contributing heavily to the growing disparities in student achievement. The fifth is that we have failed to motivate most of our students to take tough courses and work hard, thus missing one of the most important drivers of success in the best-performing nations. The sixth is that our teacher compensation system is designed to reward time in service, rather than to attract the best and brightest of our college students and reward the best of our teachers. The seventh is that, too often, our testing system rewards students who will be good at routine work, while not providing opportunities for students to display creative and innovative thinking and analysis. The eighth is that, too often, we have built a bureaucracy in our schools in which, apart from the superintendent of schools, the people who have the responsibility do not have the power, and the people who have the power do not have the responsibility. The ninth is that most of the people who will be in our workforce

are already in it, and if they cannot master the new literacy at high levels, it will not matter what we do in our schools. And the tenth is that although we have an elaborate funding mechanism to provide funds to send young people to college and university to launch them in the careers of their choice, we have done a very poor job of making it possible for adults who have full-time jobs and family responsibilities to get the continuing education and training they need to survive in the world that is coming.

But the most important truth is none of these. It is that we do not need new programs, and we need less money than one might think. The one thing that is indispensable is a new system. The problem is not with our educators. It is with the system in which they work. That is what the new Commission focused on. And it is the implementation of this system that will take courage and leadership.

Our recommendations follow.

#### **STEP 1:**

#### **Assume that we will do the job right the first time**

A number of other countries assume that their students are ready for college — really ready for college — when they are 16 years old. So let's start out assuming that we can match or even exceed their performance if we are doing everything right. Further assume for the moment that we want to send everyone, or almost everyone, to college. Now set up a system to do it. Our first step is creating a set of Board Examinations. States will have their own Board Examinations, and some national

We propose a system that has its own integrity, though it can be implemented in many ways.



These changes would enable the nation to pay beginning teachers about \$45,000 per year, which is now the median teachers' pay, and to pay about \$95,000 per year to the typical teachers working at the top of new career ladders for a regular teaching year and as much as \$110,000 per year to teachers willing to work the same hours per year as other professionals typically do.

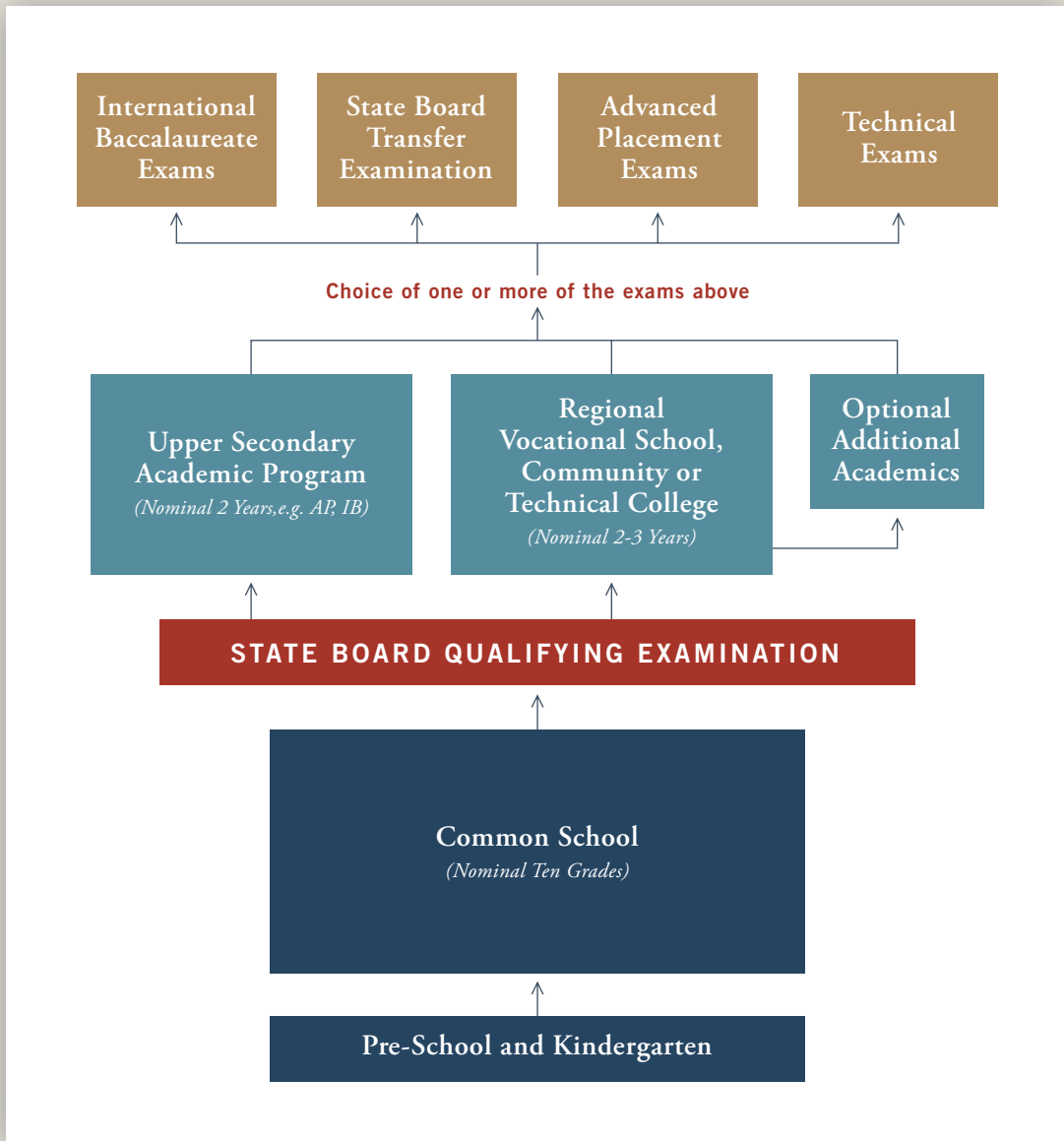
and even international organizations will offer their own. A Board Exam is an exam in a set of core subjects that is based on a syllabus provided by the Board. So the point of the exam is to find out whether the student has learned from the course what he or she was supposed to learn.

For most students, the first Board Exam will come at the end of 10th grade. A few might take it earlier — some might not succeed on their first try, so they might take another year to two to succeed. The standards will be set at the expectations incorporated in the exams given by the countries that do the best job educating their students. But it will in any case be set no lower than the standard for entering community colleges in the state without remediation. We believe that when all of our recommendations are implemented, 95 percent of our students will meet this standard.

Students who score well enough will be guaranteed the right to go to their community college to begin a program leading to a two-year technical degree or a two-year program designed to enable the student to transfer later into a four-year state college. The students who get a good enough score can stay in high school to prepare for a second Board Exam, like the ones given by the International Baccalaureate program, or the Advanced Placement exams, or another state or private equivalent. When those students are finished with their program, assuming they do well enough on their second set of Board Exams, they can go off to a selective college or university and might or might not be given college credit for the courses they took in high school. These students and the ones who went the community college route will have the option when they finish their programs of taking a second set of state Board

*New Commission on the Skills of the American Workforce*

## SCHEMA FOR STUDENT PROGRESSION THROUGH THE SYSTEM



Exams, and if they hit certain scores, they will be guaranteed the right to go to their state colleges and some state universities as juniors.

Our full report provides a lot more detail, but that is the essence of the idea. Students could challenge these Board Exams as soon as they were ready, and they could keep challenging them all their lives, if necessary. No one would fail. If they did not succeed, they would just try again.

Now many students just slide through high school, because they know that all they have to do is get passes in their courses or a satisfactory score on an 8th- or 9th-grade-level literacy test to go to college. With this system, they will know that they have to work hard in school to get anywhere, and, the evidence shows, that is exactly what they will do.

But they will have a lot of help along the way, as you will see in the next section.

**STEP 2:**  
**Make much more efficient use of the available resources**

The changes just described, plus a couple we will describe in a moment, will save \$60 billion nationally. Some of this will be offset by the fact that many, many fewer students will become dropouts, and we will have to pay for the students to complete school who would otherwise have dropped out. We asked ourselves what would happen if we took the savings and deployed it in roughly equal amounts against three buckets of expenditure: (1) recruiting, training, and deploying a teaching force for the nation's schools recruited from the top third of the

high school students going on to college; (2) building a high-quality full-service early childhood education system for every 3- and 4-year-old student in the United States, and (3) giving the nation's disadvantaged students the resources they need to succeed against internationally benchmarked education standards. If we do not do these things, there is not a prayer that we will be able to get our 10th graders to do college-level work. But if we actually do these things, along with the other things we recommend here, there is every reason to believe that we can send almost everyone to college and have them do well there. This redeployment of resources is a key feature of the plan to do just that.

**STEP 3:**  
**Recruit from the top third of the high school graduates going on to college for the next generation of school teachers**

It is simply not possible for our students to graduate from our schools by the millions with very strong mathematical reasoning skills, a sound conceptual grasp of science, strong writing skills, world-beating capacity for creativity and innovation, and everything else we talk about in this report unless their teachers have the knowledge and skills we want our children to have.

Many of our teachers are superb. But we have for a long time gotten better teachers than we deserved because of the limited opportunities for women and minorities in our workforce. Those opportunities are far wider now, and we are left with the reality that we are now recruiting more of our teachers from the bottom third of the high school students going to college than is

wise. To succeed, we must recruit many more from the top third.

To get this group requires us, first, to change the shape of teacher compensation, which is currently backloaded, in the sense that it is weak on cash compensation, especially up front, and heavy on pensions and health benefits for the retired teacher. This is what one would want if the idea were to retain the teachers with the most years of service, but it makes no sense if what we are after is to attract young people who are thinking most about how they are going to get the cash they need to enjoy themselves, buy a home, support a family, and pay for college for their children. The first step in our plan is to make retirement benefits comparable to those of the better firms in the private sector and use the money that is saved from this measure to increase teachers' cash compensation. We would add to this a substantial amount from what is saved by changing the progression of students through the system. These changes would enable the nation to pay beginning teachers about \$45,000 per year, which is now the median teachers' pay, and to pay about \$95,000 per year to the typical teachers working at the top of new career ladders for a regular teaching year and as much as \$110,000 per year to teachers willing to work the same hours per year as other professionals typically do.

These figures are on average for the nation as a whole. Higher-cost states would have higher salary scales, and lower-cost states would pay less. And within many states, adjustments would be made to take account of differences within the state in the cost of living. But salaries would rise substantially everywhere.

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Moving from America's tests to the kinds of examinations and assessments that will capture these and other qualities at the level of accomplishment required will entail a major overhaul of the American testing industry.

We would have teachers be employed by the state, not the local districts, on a statewide salary schedule. There would be salary increments for especially effective teachers, teachers at higher points on a new career ladder, those willing to teach in remote or especially tough urban areas, and teachers in shortage fields like mathematics and special education. Those teachers would be licensed by the state and put on a list of available teachers, but none would actually be paid until they were hired by schools (see below).

In the new system, it would be relatively easy for teachers to reach out to other teachers and form organizations to operate schools themselves, much like doctors, attorneys, and architects form partnerships to offer their services to the public.

The current policies regarding teacher education would be scrapped. The state would create a new Teacher Development Agency charged with recruiting, training, and certifying teachers. The state would launch national recruiting campaigns, allocate slots for training the needed number of teachers, and write performance contracts with schools of education, but also teachers' collaboratives, school districts, and others interested in training teachers. Those providers that meet the state's performance requirements would get a larger number of slots than providers whose graduates perform less well. To get listed by the state on its register of available teachers, candidates would have to show that they had at least a bachelor's degree in the subject they propose to teach and would have to pass a rigorous teaching performance assessment.

In states with collective bargaining laws, legislatures would need to work closely with the organizations that represent teachers to effect the kinds of changes we have in mind, for it is obviously easier to implement such changes with strong union support.

**STEP 4:**  
**Develop standards, assessments, and curriculum that reflect today's needs and tomorrow's requirements**

Many states have tests that students must pass to graduate from high school. But few require more than an 8th-grade-level of literacy in international terms. While many states have increased the proportion of the test that enables students to construct their own answers to questions rather than select an answer from a preselected list, these tests still have a way to go to provide the kinds of information that the world's best high school exit examinations provide. On balance, they are designed to measure the acquisition of discipline-based knowledge in the core subjects in the curriculum, but, more often than not, little or nothing is done to measure many of the other qualities that we have suggested may spell the difference between success and failure for the students who will grow up to be the workers of 21st century America: creativity and innovation, facility with the use of ideas and abstractions, the self-discipline and organization needed to manage one's work and drive it through to a successful conclusion, the ability to function well as a member of a team, and so on.

Moving from America's tests to the kinds of examinations and assessments that will capture these and other qualities at the level



of accomplishment required will entail a major overhaul of the American testing industry. If that is not done, then nothing else will matter, because the old saw that what gets measured is what gets taught is essentially true. A system that pursues the wrong goals more efficiently is not a system this nation needs.

When we have the right assessments, and they are connected to the right syllabi, then the task will be to create instructional materials fashioned in the same spirit and train our teachers to use the standards, assessments, syllabi, and materials as well as possible, just as we train our physicians to use the techniques, tools, and pharmaceuticals at their command as well as possible. But it all starts with the standards and assessments.

**STEP 5:**  
**Create high performance schools and districts everywhere — how the system should be governed, financed, organized, and managed**

The governance, organizational, and management scheme of American schools was created in the early years of the 20th century to match the industrial organization of the time. It was no doubt appropriate for an era when most work required relatively low literacy levels, most teachers had little more education than their students, and efficiency of a rather mechanical sort was the highest value of the system.

In recent years, American industry has shed this management model in favor of high-performance management models designed to produce high-quality products and services with highly educated workers. Some school districts are moving in this direction. That movement needs to be accelerated, formalized, and brought

The schools would have complete discretion over the way its funds are spent, the staffing schedule, the organization and management of the school, the school's schedule and its program, as long as it provided the curriculum and met the testing and other accountability requirements imposed by the state.

to scale. We share here one way to make that work. No doubt there are others that would work as well.

First, the role of school boards would change. Schools would no longer be owned by local school districts. Instead, schools would be operated by independent contractors, many of them limited-liability corporations owned and run by teachers. The primary role of school district central offices would be to write performance contracts with the operators of these schools, monitor their operations, cancel or decide not to renew the contracts of those providers that did not perform well, and find others that could do better. The local boards would also be responsible for collecting a wide range of data from the operators specified by the state, verifying these data, forwarding them to the state, and sharing them with the public and with parents of children in the schools. They would also be responsible for connecting the schools to a wide range of social services in the community, a function made easier in those cases in which the mayor is responsible for both those services and the schools.

The contract schools would be public schools, subject to all of the safety, curriculum, testing, and other accountability requirements of public schools. The teachers in these schools would be employees of the state, as previously noted.

The schools would be funded directly by the state, according to a pupil-weighting formula as described below. The schools would have complete discretion over the way their funds are spent, the staffing schedule, their organization and management, their schedule, and their program, as long as they provided

the curriculum and met the testing and other accountability requirements imposed by the state.

Both the state and the district could create a wide range of performance incentives for the schools to improve the performance of their students. Schools would be encouraged to reach out to the community and parents and would have strong incentives to do so. Districts could provide support services to the schools, but the schools would be free to obtain the services they needed wherever they wished.

No organization could operate a school that was not affiliated with a helping organization approved by the state, unless the school was itself such an organization. These helping organizations — which could range from schools of education to teachers' collaboratives to for-profit and nonprofit organizations — would have to have the capacity to provide technical assistance and training to the schools in their network on a wide range of matters ranging from management and accounting to curriculum and pedagogy.

Parents and students could choose among all the available contract schools, taking advantage of the performance data these schools would be obligated to produce. Oversubscribed schools would not be permitted to discriminate in admissions. Districts would be obligated to make sure that there were sufficient places for all the students who needed places. The competitive, data-based market, combined with the performance contracts themselves, would create schools that were constantly seeking to improve their performance year in and year out. The fact that schools serving

students from low-income families and other categories of disadvantaged students would get substantially more money than schools with more advantaged student bodies would ensure that these students would be served by high-quality school operators. It would be very hard for low-quality school operators to survive in this environment.

**STEP 6:**

**Provide high-quality, universal early childhood education**

For decades, researchers have almost universally concluded that high-quality early childhood education is one of the best investments a nation can make in its young people. But this country has never committed the funds necessary to provide high-quality early childhood education to its 3- and 4-year-olds. The funds freed up by the Commission's proposals for altering the student progression through the system will, for the first time, make it possible for the whole nation to do what should have been done many years ago.

**STEP 7:**

**Give strong support to the students who need it the most**

The Commission's proposals, taken together, should transform the prospects of disadvantaged children. The proposal to abandon local funding of schools in favor of state funding using a uniform pupil-weighting funding formula, combined with the addition of \$19 billion to the system as a whole, will make it possible, for the first time in the history of the United States, to have an equitable means of funding our schools, while at the same time leveling up the funding of the system as a whole, so that relatively well-

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to-do districts will not have the incentive to defeat the system that they would have if the existing funds were simply redistributed.

The additional funds for schools serving high concentrations of disadvantaged students will make it possible for those schools to stay open from early in the morning until late at night, offering a wide range of supportive services to the students and their families. They will have the funds needed to screen and diagnose their students, and to make sure that they get the eyeglasses they need or the hearing aids or the therapy for dyslexia or any of the many other things that have prevented these children from learning as well as their wealthier peers. These schools will be able to afford the tutors they need, the counselors and mentors that are the birthright of richer children elsewhere. And they will have the staff needed to reach out to the community and to find the community leaders in the private sector who will develop campaigns to raise the aspirations of these young people, so they come to believe that they too can reach the top if they work hard enough.

In this scheme, schools serving poor students will no longer be routinely outbid for the services of our best teachers by wealthier communities. Nor will our experienced teachers be able to avoid teaching the students who need them the most by virtue of their seniority in the system. In fact, our teachers will be offered additional financial incentives to teach in remote areas and our toughest urban neighborhoods. And the state Teacher Development Agencies will be charged with making a special effort to recruit first-rate teachers for our minority children who look like them and can connect with these children. In

all these ways and more, this plan will give the students who need our help the most a much better chance than they have now.

**STEP 8:**  
**Enable every member of the adult workforce to get the new literacy skills**

As we pointed out above, most of the people we will have in our workforce in 20 years are in the workforce now. The Commission proposes that the federal government pass legislation entitling every adult and young adult worker — at no charge — to the education required to meet the standard set by the new Board Exam standards that most young people will meet by age 16. This is the standard that the state determines will entitle the holder to enter college without remediation.

Not all young adults and older members of the workforce will choose to take advantage of this opportunity, but many will. And, as some do, others will be encouraged to try. In this way, millions of people whose prospects can only be described as grim will get a new lease on life, and the economy as a whole will become much more productive. High schools all over the country and many other institutions as well will find that they have a new clientele of people who will be very grateful for a second chance at the opportunities that life affords those with an education.

**STEP 9:**  
**Create personal competitiveness accounts — a GI Bill for our times**

The intention of Step 8 is to provide a foundation of high literacy among our entire workforce. But foundation literacy is not

enough. Our economic analysis suggests that the next few decades will be a time of increasing turbulence in the job market as outsourcing increases, product cycles get shorter, and technological change destroys not just firms but entire industries with increasing frequency. In this environment, it will be extremely important that workers everywhere be able to get the training they need to move quickly to other jobs, other professions, and other industries over and over again. As we noted above, the higher education finance system was set up to serve the needs of full-time students, not full-time workers with family obligations, the very people we are talking about here. So we propose that the government of the United States create Personal Competitiveness Accounts enabling everyone to get the continuing education and training they will need throughout their work lives. The government would create these accounts for every baby when born, with an initial deposit of \$500, and continue to contribute at a lower level until that young person is 16, and later if the account holder was earning very little. The account would earn tax-protected interest as long as there was principal in it. Employers could contribute to it tax free. So could the individual, through salary reductions, and even states might want to contribute as well. The account holder could use the money to pay for tuition at any accredited institution for any work-related program of study, as well as books and fees.

The cost of getting our adults to the new standards of literacy, combined with the cost of this new GI Bill, comes to about \$31 billion per year. This is a lot of money for a country deeply in debt. But it is probably the single most important investment we can make in

our economic future. No other step the nation could take would have a higher payoff in economic agility and competitiveness, for both the individual and the society as a whole.

**STEP 10:**  
**Create regional competitiveness authorities to make America competitive**

Government-funded job training programs in the United States were mostly created to provide relatively unskilled people the skills needed to get a job — any job — as quickly as possible. So it is not surprising that government-funded job training has not, on the whole, been connected to the government's efforts to stimulate economic development. That being so, the jobs that people who go through this system get are all too often short term and dead end. It is now clear that the most effective strategies for economic development are technology based and regionally focused. It is also clear that the most effective way to provide a real future for people who need jobs is to provide training that is related to the economic future of the region those people live in, for jobs in growth industries.

So the Commission recommends that the federal government develop legislation to encourage the states to create regional economic development authorities involving the key leaders from many sectors in those regions in the development of economic development strategies that make sense to them. These authorities would not only be responsible for coming up with development goals and strategies for their regions, but also for coordinating the work of the region's education and training institutions to make

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Encourage the states to create regional economic development authorities not only responsible for coming up with development goals and strategies for their regions, but also for coordinating the work of the region's education and training institutions.



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sure that each region's workers develop the skills and knowledge needed to be successful in that labor market.

We settled on the word "authorities" to describe these new bodies because we wanted to convey the idea that they need to be more than debating societies. They need to be able to raise and spend the money needed to develop their regions over time. If these new bodies are as successful as we think they will be, the federal government should consider lifting many of the restrictions on the separate programs they will administer and permitting them to combine the funds from these programs in ways that are more likely to lead to both strong economic growth and strong job growth, especially for the most vulnerable people in the country.

The reader will note that most of our recommendations are made to the states, where most of the responsibility for these core functions in American life resides. We will not be disappointed if one state chooses to do it one way and another chooses a different path. We did not write legislative specifications. Our aim is to stimulate many variations of these ideas. But that does not mean that we encourage cherry-picking only those ideas that cost the least and offend the fewest. Without the pain inflicted by the proposals we make for saving money, there will be no gain from the ways we propose to spend it. If legislatures pocket the gains from the savings we propose and fail to make the investments we recommend, then that will simply lead to lower performance all around. We do not propose a collection of initiatives. We propose a system that has its own integrity, though it can be implemented in many ways.



## WE ARE DEEPLY GRATEFUL TO THE FOUNDATIONS THAT SUPPORTED THIS WORK

ANNIE E. CASEY FOUNDATION  
BILL AND MELINDA GATES FOUNDATION  
WILLIAM AND FLORA HEWLETT FOUNDATION  
LUMINA FOUNDATION FOR EDUCATION



## THE STUDY

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The support of these foundations made it possible to conduct a worldwide program of research and analysis to support the work of the Commission. The research lasted almost two years, and engaged a staff of 19 people as well as many consultants. The work included five major economic and labor market studies, eight international industry studies, a series of comparative education studies on four continents, another series of studies of state workforce development systems within the United States, papers commissioned from leading researchers in the United States and other countries, focus groups, public opinion research, and expert interviews in this country and abroad.

In addition to the United States, the countries in which field research was conducted included Australia, Belgium, Canada, China, Czech Republic, England, Finland, France, Germany, India, Ireland, Italy, and New Zealand.

This research program is more amply described and the reports we produced are listed in the full report of the Commission. Many of the reports are available on the Commission's Web site: [www.skillscommission.org](http://www.skillscommission.org)

## THE *NEW* COMMISSION ON THE SKILLS OF THE AMERICAN WORKFORCE

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\*Sara Martinez Tucker, on her nomination by President Bush to the position of Under Secretary of Education in the U.S. Department of Education, resigned from the Commission on September 6, 2006.

## COMMENTS FROM THE COMMISSIONERS

“This proposal is radical? Yes. Hard to achieve? Of course. Essential? Absolutely. Our nation’s schools are failing to educate our children, and that has to stop—else we condemn our own kids to ever lower incomes. We must act—now!” —WILLIAM E. BROCK, FORMER SECRETARY OF LABOR, REAGAN ADMINISTRATION

“Being a member of this Commission was exciting and enlightening. I emerged convinced that there is an urgent need for precisely the kind of national discussion—probing and thoughtful—that we had and that this report is intended to provoke. It is essential that these recommendations get a full and fair hearing.” —BEVERLY O’NEILL, FORMER MAYOR, LONG BEACH, CALIFORNIA

“This provocative report challenges all of us to act now. Entire nations are working harder and studying longer in order to enjoy what many Americans have come to take for granted. The question is: Are there states or communities with the confidence and the courage to act before it is too late? In 1983, we were *A Nation at Risk*. Twenty-three years later, in 2006, the risk is even greater. It is getting late. For the sake of our children and our future, read this report and get to work.” —JOHN ENGLER, PRESIDENT, NATIONAL ASSOCIATION OF MANUFACTURERS

“I commend the Commission for a report that presents bold and promising proposals to deal with the issues that our nation and its workforce will face in the 21st century.” —JOEL I. KLEIN, CHANCELLOR, NEW YORK CITY PUBLIC SCHOOLS

“The question this report raises is whether our country has the kind of education system that is needed to maintain America’s standard of living for our children, our grandchildren, and future generations. I very much hope that it will spark the kind of tough, honest debate on that topic that it so richly deserves.” —RICHARD W. RILEY, FORMER SECRETARY OF EDUCATION, CLINTON ADMINISTRATION

“Bold, inventive, analytic, and piercing, the report’s recommendations stand to make a huge difference in how America thinks about and enacts its educational enterprise for *all*—including its youngest—students.” —SHARON LYNN KAGAN, VIRGINIA & LEONARD MARX PROFESSOR OF EARLY CHILDHOOD AND FAMILY POLICY, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, AND CODIRECTOR, THE NATIONAL CENTER FOR CHILDREN AND FAMILIES

“This report deals with the critical issue of training and educating the current workforce to meet the competitive challenges of the future and indicates the depth of the changes our nation needs to make to change our culture to one of life-long learning.” —MORTON BAHR, PRESIDENT EMERITUS, COMMUNICATIONS WORKERS OF AMERICA

“This report offers a radical new blueprint for making America’s K–12 educational experience more meaningful and effective. It’s a fascinating and thought-provoking read that is sure to get the American educational establishment talking.” —**CHARLES B. REED, CHANCELLOR, CALIFORNIA STATE UNIVERSITY SYSTEM**

“This report shows how states and professional educators can create efficient, high-performance school systems to educate all students to high standards.” —**RAY MARSHALL, FORMER SECRETARY OF LABOR, CARTER ADMINISTRATION**

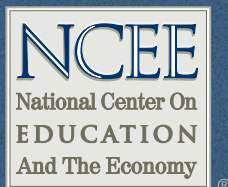
“A thorough, thoughtful, and timely study. Most important, it goes far beyond the normal conclusions. The recommendations are sweeping and controversial but must be considered seriously as they flow directly from the logic of the study. If not these, what then?” —**HENRY B. SCHACHT, MANAGING DIRECTOR, WARBURG PINCUS LLC**

“Piecemeal reform of public education in America is insufficient to deliver on the promise that every child will receive an education that leads to a good job, productive life, and responsible citizenship. The *New Commission Report* is a coherent, comprehensive, systemic plan for how to enable public education in America to be the best in the world.” —**THOMAS W. PAYZANT, FORMER SUPERINTENDENT, BOSTON PUBLIC SCHOOLS**

“It is my hope that the report will be heeded at the highest policy levels in every local community. What is at stake for our nation and every citizen is nothing less than the prospect of a plummeting standard of living for our children and American generations to come if we fail to act.” —**PAUL A. ELSNER, FORMER PRESIDENT, MARICOPA COMMUNITY COLLEGE SYSTEM**

“This may be a policy report, but it should be read by every practitioner. Brutally honest, it shows why money alone cannot get all our students ready for college and lays out bold and imaginative solutions to the problems that educators deal with every day, solutions that will take courage to implement, but that are at the same time realistic and practical.” —**JUDY B. CODDING, PRESIDENT, AMERICA’S CHOICE, INC.**

“I become more concerned each day that our students are falling further behind and the people of this nation do not seem to be alarmed. This report lays out the kind of drastic change to the system that is crucial if we are to remain a viable economic and political leader in the world.” —**DAVID P. DRISCOLL, COMMISSIONER OF EDUCATION, MASSACHUSETTS**



The National Center on Education and the Economy is a not-for-profit organization created to develop proposals for building the world class education and training system that the United States must have if it is to continue to be a world class economy. The National Center engages in policy analysis and development and works collaboratively with others at the local, state and national levels to advance its proposals in the policy arena.

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