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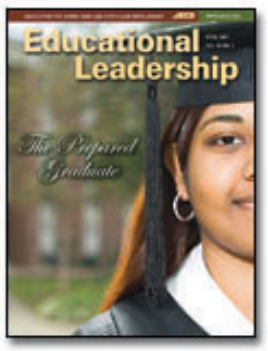

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Charting a New Course for Schools

The United States no longer has the best educated workforce in the world. A new report, *Tough Choices or Tough Times*, suggests that a different kind of school system could get us there.

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Developing countries, such as China, India, and Korea, have learned how to produce highly educated workers who offer worldclass skills at low wages. Those workers, who are now available to global employers over the Internet, directly compete with the U.S. workforce. Why, asks the New Commission on the Skills of the AmericanWorkforce, would global employers pay U.S. workers more than twice as much for the same skills?

The Commission's new report, *Tough Choices or Tough Times*, considers this issue. It continues a discussion that began in 1990, when the first Commission released a report titled *America's Choice: High Skills or Low Wages*, which called attention to the steady loss of lowskill jobs to countries that could offer cheaper labor. The 1990 report proposed raising education standards in the United States so U.S. workers could migrate to better-paying work requiring higher-level skills. *Tough Choices or Tough Times* ups the ante by suggesting what it will take to vault the U. S. education system to top performance and ensure that graduates have the skills and knowledge that they, and the nation, need.

A Clear and Present Danger

Given the dynamics of global competition, the need for highly skilled U.S. graduates is becoming more pressing. For one thing, people in other countries are becoming more educated. In 1960, the United States led the world in the percentage of working-age adults who had completed high school (Organisation for Economic Co-operation and Development [OECD], 2006a). This is no longer the case. Also, 30 years ago, U.S. students accounted for 30 percent of the world's population of college students. That percentage has now plunged to 14 percent and continues to fall (OECD, 2006b).

The United States' low rankings in international comparative studies of achievement are another cause for concern. Moreover, rapid advances in technology are resulting in the automation of jobs—not just low-skill jobs, as used to be the case, but any job that involves routine work. Many well-paying middle-class jobs fall in this category and are becoming increasingly vulnerable.

With this in mind, how can the United States ensure that its workers continue to command high wages and maintain their standard of living? We can do so only by meeting two criteria: We must match the best academic performance in the world and, at the same time, offer the most creative and innovative workers.

Only companies at the leading edge of their industries will be able to pay premium wages. And what will they pay a premium for? For workers who have a high level of preparation in reading, writing, speaking, mathematics, science, literature, history, and the arts; who are comfortable with ideas and abstractions; who are creative and can imagine useful and innovative products; who can solve problems by integrating knowledge from multiple fields; and who function well in groups and adapt easily to change.

Unfortunately, we're stuck in an education system that is not geared to produce these kinds of graduates. But it's not for lack of trying to change it. We have implemented a plethora of programs, policies, and interventions in schools, yet our academic performance remains mediocre and our costs continue to rise. We have the second most expensive system in the world,[1] which is not surprising, given that the per-pupil cost of our elementary and secondary education system has increased 240 percent over the last 30 years, after accounting for inflation. The one option that we have not tried is to overhaul the entire U.S. education system.

Investing in a System that Works

The Commission has proposed radical departures from the United States' current education system, whose main features were put in place a century ago to meet the needs of a different era. *Tough Choices or Tough Times* holds up a vision of what a more effective system might look like. Seven steps can take us there.

Step One: Chart a new course for student progression through the system.

Let's begin with a thought experiment. Suppose we created state examinations of the same type and quality as the College Board advanced placement examinations. Suppose they were set to the standard required to do college-level work in the state's community and technical colleges. Now suppose that students—or, for that matter, adults—could take these exams whenever they thought they were sufficiently prepared and as often as they liked. Also, suppose for a moment that the majority of our high school students could pass these examinations at age 16 and that 95 percent could meet the standard by the time they left high school.

In this thought experiment, students who passed the exam could, if they chose, continue their studies in the state's community and technical colleges. Those who received somewhat higher scores could choose to stay in high school and continue in the International Baccalaureate program, a program consisting of advanced placement courses, a similar program developed by ACT, or one of the international equivalents of these programs. When they completed their program of study, they could apply to the colleges of their choice.

If you think this scenario sounds far-fetched, it's not. Denmark graduates the majority of its

students ready for college at 16 years old. And England and India permit students or schools to choose from a limited group of state-approved syllabus-based exams.

Step Two: Reinvest available resources where it counts.

If our thought experiment were to become a reality, we could save enormous sums of money. Because most students would be prepared at 16 years old for college-level work, savings would be realized in high schools (because students would have the opportunity to exit early) and in colleges (because remediation costs would decrease). In fact, our analysis found that close to $60 billion would be available for strategic reinvestment in schools.

We would invest this money in three crucial areas: (1) building a high-quality early education system; (2) recruiting, training, and deploying a high-quality teaching force; and (3) providing additional resources to disadvantaged students so they meet rigorous education standards. Reinvestment in these areas, combined with other features of the plan, could get most students ready for college by age 16 and 95 percent of students ready for college by the end of high school.

Step 3: Invest in universal preschool education.

The United States has long trailed behind many other countries in providing universal, high-quality early childhood education. This is where we would spend the first third of our investment fund—a little more than $19 billion. That sum would buy high-quality early childhood education for all 4-year-olds in the United States whose families chose to enroll them (close to 3.5 million children) and for all low-income 3-year-olds (more than 600,000 children; National Center for Children in Poverty, 2004; National Center for Education Statistics, 2005).

Scores of studies indicate that high-quality early education programs can ameliorate or reverse learning disparities (Burr & Guinewald, 2006; King, 2006). However, for early childhood education to lead to improved outcomes for children, services must be made available equitably across states and be supported by an infrastructure that ensures high quality. States would need to create an infrastructure that would establish and monitor standards for children's learning and program quality, provide enriched professional development and adequate compensation, establish governance systems to promote the efficient use of resources, establish links among schools and other institutions that promote children's healthy development, and provide parents and policymakers with evaluative data to inform decision making. (For an update on how states are grappling with these issues, see Sacks & Ruzzi, 2005.)

Step 4: Recruit teachers from the top third of those entering college.

How can we expect to produce highly skilled students if teachers are not highly skilled? Unlike the United States, Singapore recruits its teachers from the top third of its high school graduates. Moreover, graduates with a BA or BS in education earn more than most other university graduates, with the exception of students graduating with law, business, computer engineering, and medical degrees (Singapore Ministry of Manpower, 2005). Increasing compensation can make teaching more appealing to top-performing students, especially to

young teachers, who typically are more interested in higher salaries than in retirement benefits or pensions that come at the end of a career.

In our thought experiment, we would invest approximately $19 billion in teachers' compensation. Teachers would work through a four-step career ladder, with starting pay at approximately $45,000, which is now the median pay for teachers. Teachers at the top of the ladder would earn approximately $95,000. Those who were willing to work year-round would make $110,000 annually. Polling we conducted showed that college students in the top third of the distribution might elect to be teachers if teacher compensation reflected these higher amounts.

Step 5: Adopt high-performance management models to improve schools and districts.

We would dramatically change the role of school districts. Under the plan, school districts would no longer operate schools. Instead, schools would be run by third-party organizations—preferably teams of teachers organized as limited liability corporations—working under contract to school districts (see Kolderie, 2002, for a discussion of teacher ownership). Districts and local boards would have a demanding and focused role: to manage a portfolio of schools working under performance contracts that would reward school operators that meet the district's student performance goals. The district would try hard to help those whose performance lagged, but if operators failed to meet their goals despite this help, the district would seek proposals from qualified operators who thought they could do a better job. Both the Netherlands and Flemish Belgium, the two countries with the highest mathematics performance in Europe, permit third-party groups—namely, families—to own and run schools.

All these schools would be public schools. They could not limit admission; if there were more applicants than spaces, they would have to admit students by lottery. Everyone would be accountable for student performance against state standards and for teaching the state curriculum. Beyond that, however, schools would have great latitude in establishing their own particular character and would be encouraged to develop distinctive programs.

The state would directly fund these public schools. (The United States is one of the few industrialized nations in the world that funds its schools locally, and often with poor results.) Funds would be distributed to the schools according to a formula based on the characteristics of the school's student body. Each student would get the same base funding. However, there would be various increments for students from low-income families, for students from homes in which English is not spoken, for mildly disabled students, for severely disabled students, and so on.

Teachers would be recruited, trained, certified, and employed by the state on a standard schedule of salary and benefits, with adjustments for significant differences in cost of living in different parts of the state. But they would be paid only when a particular school hired them. Each school would get its funds in one lump sum, with the amounts needed to pay its teachers deducted from the total. The school would be free to decide on how it would spend the remaining money in its budget.

School operators could only get a contract through association with a helping organization approved by the state. Helping organizations could be universities, for-profit organizations, independent not-for-profits, museums, technology companies, teachers unions, or such organizations as the Asia Society, the College Board, Cisco Systems, or KIPP Schools.

The kinds of organizations that would sponsor contract schools are very like those that have sponsored the best charter schools. To get approval, the helping agency would need to show a strong track record in providing high-quality technical assistance and professional development as well as support on matters ranging from budget and leadership training to curriculum and pedagogy.

Step 6: Provide strong support to disadvantaged students.

We would use what was left from the dividend produced by the change in student progression through the system—a little over $18 billion—to "top up" school funding statewide in all the states. This would make it possible to equalize school funding without raiding wealthier districts, which is the only way school funding will ever be made equitable in the United States. It would result in greatly increased funding for schools serving the most disadvantaged students, enabling such schools to operate extended days; provide extensive diagnostic screening and interventions; offer support for students with physical and learning disabilities; and furnish such crucial supports as mentors, tutors, and social and family services. Implementing these measures, along with having high-quality teachers and a strong early childhood education system, would transform the opportunities available to disadvantaged children.

Step 7: Rebuild standards, assessment, and curriculum to reflect today's needs and tomorrow's requirements.

We have described a highly efficient, highly performance-oriented education system in which competent, entrepreneurial educators have great freedom to chart their own courses as long as they produce solid gains in student achievement. But in such systems, everything depends on how we measure student achievement. We must improve the quality and reduce the quantity of tests that our current accountability system requires. Good examinations exist, such as the advanced placement tests, the International Baccalaureate exams, and the Cambridge University International General Certificate of Secondary Education examinations (which are used in 120 countries).

What do good examinations look like? They are framed by sound, logically ordered curriculum frameworks. They are based on syllabi describing a high-quality curriculum that is intellectually coherent and compelling. They demand broad and deep knowledge. No amount of test preparation will improve a student's performance on these kinds of exams. Students succeed only if they can read and write well across content areas; have a sound grasp of the concepts on which a discipline is based (mathematics and science, for example); or can exhibit called-for performances (in the case of music or art). In all cases, good exams make it possible for students to show what they can do in the form of extended student work samples (like a substantial essay or research project) as well as a written test. They also give students

opportunities to creatively answer questions that may not have occurred to those who assembled the exam.

Unfortunately, exams like these cost between $80 and $100 per subject per student tested, which is far more than we currently spend. Only exams of this sort, however, will enable us to properly measure whether our students have successfully mastered key ideas, concepts, facts, and procedures and whether they have the capacity for creativity and innovation crucial for their and the economy's success.

A Nation Still at Risk

Will it be tough to implement a program like this? Sure. Do we have a choice? No. We plan to begin by offering assistance to a small group of states that appear to be most committed to the framework described. We hope that as other states see what such a plan can accomplish, they will follow.

Excerpts from *Tough Choices or Tough Times?*

- The United States will have to be number one or two in technology leadership in every industry in which it expects to be a major competitor. (p. 8)
- Americans are not likely to succeed unless many more of us than at present understand a good deal about the other peoples of the world. (p. 27)
- Being good at math will entail not just being able to do math well but being very good at mathematical reasoning. (p. 29)
- History, music, drawing and painting, and economics will give our students an edge just as surely as math and science will. (p. 29)
- Our curricula and our pedagogy heavily emphasize analysis over synthesis, the distinguishing feature of the creative impulse. (p. 30)
- The United States . . . has managed to construct a system that could not be better designed to deprive the vast majority of our students of a reason to take tough courses or to study hard. (p. 37)
- To visit the typical American school is to practice a certain kind of archaeology. We do not throw anything away. Policies are not discontinued; we simply add new ones. (p. 38)
- There will be no net growth in our workforce for a long time coming from native-born Americans. All the net growth will come from immigrants. (p. 41)

Endnote

[1] According to OECD's most recent report, the United States ranks third in per-pupil spending for primary education (behind Denmark and Norway). However, the United States ranks first in spending for postsecondary education. Taken together, the United States is second in per-pupil spending in comparison to the other 29 OECD countries. The United States is also second to Korea in terms of per-pupil spending as a percentage of gross domestic product.

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